

APPENDIX E

Rayonier Mill Remedial Investigation Data

REMEDIAL INVESTIGATION FOR THE UPLANDS ENVIRONMENT OF THE FORMER RAYONIER MILL SITE

January 2006
Public Review Draft

Data Qualifiers Used in Rayonier Uplands RI

(only for data collected as part of RI)

Analyte Group	Lab flag	Lab Flag Definition	Applicable EPA or Method Qualifier ^a	Qualifier Definition
All Analyte Groups	D	Sample was diluted for analysis	--	No qualifier is required
	J	Result is below the calibration range	J	Concentration is an estimate
	U	Analyte was not detected	U	Analyte was not detected
Dioxins and Furans	B	Analyte was present in the method blank	B ^b	Analyte was present in the method blank
	C	TCDF result was obtained from confirmation column	--	No qualifier is required
	E	Result is above the calibration range	J	Concentration is an estimate
	K	Estimated maximum possible concentration	EMPC ^b	Estimated maximum possible concentration
Metals	*	Duplicate results were outside control limits	J	Concentration is an estimate
	B	Result is below the calibration range	J	Concentration is an estimate
	N	Spike recovery was outside control limits	J	Concentration is an estimate
Pesticides and PCBs	i	The MRL has been elevated because of chromatographic interference	--	No qualifier is required
	P	Confirmation criteria were exceeded	J	Concentration is an estimate
Petroleum Hydrocarbons	H	Chromatogram resembles petroleum product; greater amount of higher-molecular weight hydrocarbons present in sample than in standard	J	Concentration is an estimate
	O	Chromatogram resembles an oil but does not match standard	J	Concentration is an estimate
	Y	Chromatogram resembles a petroleum product but does not match standard	J	Concentration is an estimate

Notes

^a Qualifiers are as provided in EPA's functional guidelines for data validation (EPA 1999, 2002b) except as footnoted otherwise.^b As described in the EPA Contract Laboratory Program Statement of Work for analysis of dioxins and furans (EPA 2002a).

References

- USEPA. 1999. USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review. EPA-540/R-99-008. U.S. Environmental Protection Agency, Office of Emergency and Remedial Response, Washington, DC.
- USEPA. 2002a. Statement of Work for Analysis of Chlorinated Dibenzo-p-dioxins (CDDs) and Chlorinated Dibenzofurans (CDFs). U.S. Environmental Protection Agency, Analytical Operations and Data Quality Center, Washington, DC.
- USEPA. 2002b. USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review. 540-R-01-008. U.S. Environmental Protection Agency, Office of Emergency and Remedial Response, Washington, DC.

Table E-1. Inorganic Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.

<i>Analyte</i>	<i>Criteria</i>		<i>AP03</i>		<i>AP20</i>		<i>AP20 Conc</i>	<i>BL20</i>	<i>BP20</i>		<i>BY02</i>		<i>BY20</i>	
	Unrestricted	Industrial	0-3"	3"-GW	0-3"	3"-GW			0-3"	3"-GW	0-3"	3"-GW	0-3"	3"-GW
Antimony	32	b	1400	c				0.42 *,N		0.76 N				
Arsenic	0.67	b	87.5	c					3.9		4.9	0.7	5.3	3.7 6.1
Barium	5600	b	245000	c					40.5 *		93.9			
Cadmium	80	b	3500	c					0.57		0.57			
Chromium	240	b	10500	c					65.5		44.7			
Cobalt	1564.3	d	20440	d					5.8		25.1			
Copper	2960	b	129500	c					74.8		66.4			
Lead	250	a	1000	a	147	355	19.7	16	270	103 *		44.7		
Manganese	11200	b	490000	c						183		465		
Mercury	24	b	1050	c						0.27		0.15		
Nickel	1600	b	70000	c						26.3		572		
Selenium	400	b	17500	c						0.2 U		0.4 U		
Silver	400	b	17500	c						0.07		0.07		
Thallium	5.6	b	245	c						0.13 *		0.03 B		
Vanadium	560	b	24500	c						34.5		1400		
Zinc	24000	b	1050000	c						88.5		97.5		

Notes: a - Criteria based on Ecology's Method A.

b - Criteria based on Ecology's Method B
and assuming unrestricted exposure parameters.

c - Criteria based on Ecology's Method C
and assuming industrial exposure parameters.

d - Criteria based on EPA Region III Risk Based Screening Criteria.

Bold – concentrations exceeding unrestricted criteria

Bold Italic – concentrations exceeding industrial criteria

Table E-1. Inorganic Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.

<i>Analyte</i>	<i>Criteria</i>		<i>CS20</i>		<i>DB02</i>	<i>DB21</i>	<i>DK20</i>	<i>ECO20</i>	<i>ECO21</i>	<i>ECO22</i>	<i>ECO23</i>	<i>ECO25</i>
	Unrestricted	Industrial	0-3"	3"-GW	0-3"	3"-GW	3"-GW	0-20cm	0-20 cm	0-20 cm	0-15 cm	0-15 cm
Antimony	32	b	1400	c	0.08 N		0.32 N	0.04 B,*N	0.09 N	0.12 N	0.11 N	0.06 B,*,N
Arsenic	0.67	b	87.5	c	2.6		3.8	1.8	2.9	1.9	1.8	4.4
Barium	5600	b	245000	c	21.5		42	32.8 *	49.3	51.5	41.9	75.9 *
Cadmium	80	b	3500	c	0.14		0.22	0.08	0.15	0.18	0.15	0.15
Chromium	240	b	10500	c	18.8		40.9	22.2	30.5 *	27.7 *	24.2 *	45.3
Cobalt	1564.3	d	20440	d	6.1		8.4	10	8.4	7	7.2	16.3
Copper	2960	b	129500	c	17 N		79 N	26.6	19.1	20.9	19.5	38.1
Lead	250	a	1000	a	6.52	374	48.9	2.84 *	5.1	15.4	8.42	23.6 *
Manganese	11200	b	490000	c	174		301	467	317 *	272 *	314 *	551
Mercury	24	b	1050	c	0.04		0.06	0.02 B	0.03	0.05	0.03	0.05
Nickel	1600	b	70000	c	35.1		35.6	26.1	29.2	31.5	33.9	47.1
Selenium	400	b	17500	c	0.2 U		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.6 B
Silver	400	b	17500	c	0.03		0.22	0.03	0.04 N	0.05 N	0.03 N	0.07
Thallium	5.6	b	245	c	0.06		0.04	0.04 *	0.05	0.09	0.05	0.05 *
Vanadium	560	b	24500	c	26		60.9	46.7	53.2 *	49.2 *	56.4 *	83.3
Zinc	24000	b	1050000	c	109		68.1	30.4	39.7	54.8	38.7	64.3

Notes: a - Criteria based on Ecology's Method A.

b - Criteria based on Ecology's Method B
and assuming unrestricted exposure parameters.

c - Criteria based on Ecology's Method C
and assuming industrial exposure parameters.

d - Criteria based on EPA Region III Risk Based Screening Crit

Bold – concentrations exceeding unrestricted criteria

Bold Italic – concentrations exceeding industrial criteria

Table E-1. Inorganic Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.

Analyte	Criteria		<i>ECO26</i>	<i>ECO27</i>	<i>ECO28</i>	<i>ECO29</i>	<i>ECO30</i>	<i>ECO31</i>	<i>ECO32</i>	<i>ECO33</i>	<i>ECO34</i>	<i>ECO35</i>		
	Unrestricted	Industrial	0-10 cm	0-15 cm	0-15 cm	0-15 cm	0-10 cm	0-15 cm						
Antimony	32	b	1400	c	0.32 N	0.11 N	0.1 N	0.07 N	0.08 N	0.06 *,N	0.13 *,N	0.16 *,N	8.02 N	0.13 *,N
Arsenic	0.67	b	87.5	c	3.5	4.6	4.2	4	1.9	2.1	2.5	7.3	4.1	3.2
Barium	5600	b	245000	c	78.2	76.1	105	80.6	70.3	41.3 *	38.2 *	107 *	71.8	43.6 *
Cadmium	80	b	3500	c	0.22	0.18	0.3	0.19	0.15	0.06	0.09	0.52	0.36	0.14
Chromium	240	b	10500	c	55.6 *	44.9 *	56.3 *	55.2 *	38.1 *	23.2	25.5	104	37.2 *	25.2
Cobalt	1564.3	d	20440	d	16.1	14.7	19.9	19.8	8.5	6.9	6.9	17.3	12.2	7.2
Copper	2960	b	129500	c	53.1	42.8	49.7	51.9	21	15.6	17.9	80.9	77.8	22.9
Lead	250	a	1000	a	17.9	14.6	18.8	9.82	7.35	3.48	7.14 *	80.8 *	102	17.3 *
Manganese	11200	b	490000	c	549 *	536 *	649 *	631 *	213 *	317	258	610	360 *	402
Mercury	24	b	1050	c	0.06	0.07	0.08	0.04	0.04	0.03	0.04	0.19	0.08	0.1
Nickel	1600	b	70000	c	57.9	47	65.9	63.3	33.5	30.3	29.9	53.5	47.8	31.7
Selenium	400	b	17500	c	0.2 U	0.2 U	0.7 B	0.2 U	0.2 U	0.2 U	0.2 U	0.8 B	0.2 U	0.3 U
Silver	400	b	17500	c	0.06 N	0.07 N	0.1 N	0.06 N	0.06 N	0.03	0.04	0.14	0.12 N	0.05
Thallium	5.6	b	245	c	0.06	0.08	0.07	0.07	0.04	0.03 *	0.03 B,*	0.08 *	0.05	0.03 *
Vanadium	560	b	24500	c	116 *	90.3 *	107 *	106 *	70.8 *	38	54.4	94.4	49.2 *	53.1
Zinc	24000	b	1050000	c	76.9	83.9	200	77.2	78.2	33.9	34.5	173	329	65

Notes: a - Criteria based on Ecology's Method A.

b - Criteria based on Ecology's Method B
and assuming unrestricted exposure parameters.

c - Criteria based on Ecology's Method C
and assuming industrial exposure parameters.

d - Criteria based on EPA Region III Risk Based Screening Crit

Bold – concentrations exceeding unrestricted criteria

Bold Italic – concentrations exceeding industrial criteria

Table E-1. Inorganic Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.

<i>Analyte</i>	<i>Criteria</i>		<i>FR02</i>	<i>FR20</i>	<i>GB08</i>		<i>LY21</i>		<i>LY24</i>		<i>LY25</i>		
	Unrestricted	Industrial	3"-GW	3"-GW	0-3"	3"-GW	0-3"	3"-GW	0-3"	3"-GW	0-3"	3"-GW	
Antimony	32	b	1400	c	0.57 N	0.55 N			1.45 *,N	0.14 *,N	0.04 B,N	0.24 N	0.14 N 0.07 N
Arsenic	0.67	b	87.5	c	3	3.7			7.7	3	2.1	2.5	2.4 2.3
Barium	5600	b	245000	c	30.3	45			225 *	81.9 *	48.7	85.2	54.2 59
Cadmium	80	b	3500	c	0.21	0.18			3.84	0.24	0.12	0.2	0.3 0.09
Chromium	240	b	10500	c	22.4	24.5			62.7	27.2	33	34.3	38.6 34
Cobalt	1564.3	d	20440	d	6.3	5.6			11.8	8.1	14.2	11.5	12.4 12
Copper	2960	b	129500	c	34.7 N	20.8 N			89.5	21.6	62.9	55.3	41.3 39.4
Lead	250	a	1000	a	26.4	149	5.93	31.1	429 *	13.8 *	3.59	62.5	5.91 3.85
Manganese	11200	b	490000	c	253	198			1760	514	572	892	569 486
Mercury	24	b	1050	c	0.16	0.11			0.12	0.02	0.01 B	0.17	0.03 0.02
Nickel	1600	b	70000	c	31.7	27.1			70.6	33.1	39.4	57.8	48.4 43.1
Selenium	400	b	17500	c	0.2 U	0.5 B			0.7 B	0.2 U	0.2 U	0.2 U	0.2 U 0.2 U
Silver	400	b	17500	c	0.04	0.05			0.27	0.06	0.07	0.07	0.07 0.06
Thallium	5.6	b	245	c	0.03	0.07			0.21 *	0.15 *	0.04	0.05	0.06 0.04
Vanadium	560	b	24500	c	45	40.4			73.5	46.4	85.2	79.1	68.4 58.1
Zinc	24000	b	1050000	c	104	59.3			586	57.5	49.2	51.3	74 48.5

Notes: a - Criteria based on Ecology's Method A.

b - Criteria based on Ecology's Method B
and assuming unrestricted exposure parameters.

c - Criteria based on Ecology's Method C
and assuming industrial exposure parameters.

d - Criteria based on EPA Region III Risk Based Screening Crit

Bold – concentrations exceeding unrestricted criteria

Bold Italic – concentrations exceeding industrial criteria

Table E-1. Inorganic Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.

<i>Analyte</i>	<i>Criteria</i>		<i>MR03</i>		<i>MR20</i>	<i>MS20</i>	<i>PC20</i>	<i>PF02</i>	<i>PS20</i>	<i>PW20</i>	<i>RB01</i>	<i>RB01</i>	<i>RB20</i>
	Unrestricted	Industrial	0-3"	3"-GW	0-3"	3"-GW	3"-GW	0-3"	3"-GW	3"-GW	0-3"	3"-GW	0-3"
Antimony	32	b	1400	c		0.33 *,N	0.21 N	0.62 *,N		0.47 *,N	0.05 B,*N		0.71 N
Arsenic	0.67	b	87.5	c		4.1	4.2	2.8 *		4.6	2.7	4.7	6.3
Barium	5600	b	245000	c		38.7 *	71.4	23.4		303 *	40.5 *		51.4
Cadmium	80	b	3500	c		0.95	0.2	0.15		0.11	0.08		0.67
Chromium	240	b	10500	c		34.2	48.1	18.1		48.7	29		33.2
Cobalt	1564.3	d	20440	d		10.6	11.8	7		7.9	9.7		10.2
Copper	2960	b	129500	c		150	899 N	22.9 *	43.6 N	23.7	29		43
Lead	250	a	1000	a	227 *	35.4 *	90.7 *	35.4	8.37 *	3.83 *	3.87 *		27.1
Manganese	11200	b	490000	c		253	365	252 N		1580	371		515
Mercury	24	b	1050	c		0.12	0.12	0.15		0.02	0.02		0.04
Nickel	1600	b	70000	c		33.4	47.8 *	25.7		33	32.8		35.8
Selenium	400	b	17500	c		0.2 U	0.2 U	0.2 U		0.2 U	0.2 U		0.2 U
Silver	400	b	17500	c		0.05	0.07 N	0.04		0.04	0.04		0.06
Thallium	5.6	b	245	c		0.02 B,*	0.06	0.07		0.03 *	0.06 *		0.05
Vanadium	560	b	24500	c		47.6	68.6	33.5		38.7	41.7		52.6
Zinc	24000	b	1050000	c		601	83.8 *	57.8 *		26.1	40.3		372

Notes: a - Criteria based on Ecology's Method A.

b - Criteria based on Ecology's Method B
and assuming unrestricted exposure parameters.

c - Criteria based on Ecology's Method C
and assuming industrial exposure parameters.

d - Criteria based on EPA Region III Risk Based Screening Crit

Bold – concentrations exceeding unrestricted criteria

Bold Italic – concentrations exceeding industrial criteria

Table E-1. Inorganic Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.

Analyte	Criteria		RB20	RB21	RB21	RS20		RS21		SL20	SL21	SL22			
	Unrestricted	Industrial				3"-GW	0-3"	3"-GW	0-3"	3"-GW		3"-GW	0-3"	3"-GW	
Antimony	32	b	1400	c	0.26 N	0.34 N	0.2 *,N	0.11 *,N	0.21 N	0.17 N	1.87 N	0.31 N	0.07 N	0.04 B,N	
Arsenic	0.67	b	87.5	c	2.7	14.4	4.8	6.7	2.2	2.5	4	3	2.7	2.8	2.7
Barium	5600	b	245000	c	33.3	36.5	88.7 *	20 *	11.5	19.6	224	52.2	46	41.7	
Cadmium	80	b	3500	c	0.55	0.52	0.26	0.11	0.48	0.11	0.69	0.14	0.09	0.15	
Chromium	240	b	10500	c	21.8	54.5	307	28.9	35.5	24.3	23.2	24.5	29.3	29	
Cobalt	1564.3	d	20440	d	7.6	9.2	11.1	7.7	25.7	8.1	6.4	8.2	11	9.6	
Copper	2960	b	129500	c	46	61	90.9	27	178 N	43.3 N	87.7 N	62 N	30.1 N	30.1 N	
Lead	250	a	1000	a	24.3	189	85.4 *	14 *	9.06	19.1	126	18.3	4.2	3.75	
Manganese	11200	b	490000	c	233	400	340	225	551	349	1040	686	512	461	
Mercury	24	b	1050	c	0.19	0.06	0.49	0.04	0.01 B	0.02	0.02 B	0.06	0.04	0.04	
Nickel	1600	b	70000	c	122	50.1	47.1	28.3	42.1	29.9	41.2 *	52.5 *	37.2 *	35.2 *	
Selenium	400	b	17500	c	0.2 U	0.2 U	0.6 B	0.2 U	0.3 B	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
Silver	400	b	17500	c	0.22	0.08	0.12	0.04	0.38	0.05	0.1 N	0.05 N	0.05 N	0.04 N	
Thallium	5.6	b	245	c	0.06	0.04	0.06 *	0.03 *	0.04	0.02	0.03	0.04	0.03	0.03	
Vanadium	560	b	24500	c	67.6	59.2	94.3	48	121	55.9	44.5	61.4	49.7	51.1	
Zinc	24000	b	1050000	c	67.5	87	157	68.7	81.1	46.3	309 *	61.8 *	46.2 *	42.1 *	

Notes: a - Criteria based on Ecology's Method A.

b - Criteria based on Ecology's Method B
and assuming unrestricted exposure parameters.

c - Criteria based on Ecology's Method C
and assuming industrial exposure parameters.

d - Criteria based on EPA Region III Risk Based Screening Crit

Bold – concentrations exceeding unrestricted criteria

Bold Italic – concentrations exceeding industrial criteria

Table E-1. Inorganic Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.

<i>Analyte</i>	<i>Criteria</i>		<i>SR03</i>	<i>SR20</i>	<i>SR21</i>	<i>SR22</i>	<i>SR23</i>		<i>SR24</i>	<i>WM20</i>		<i>WM21</i>			
	Unrestricted	Industrial	3"-GW	3"-GW	3"-GW	3"-GW	0-3"	3"-GW	3"-GW	0-3"	3"-GW	0-3"	3"-GW		
Antimony	32	b	1400	c	1.41 *,N	1.61 *,N	0.09 N	0.16 N	0.17 *,N	6.04 *,N	9.42 N	5.38 N	0.46 N	0.11 N	
Arsenic	0.67	b	87.5	c	3.2 *	8.5 *	2.2	2.5	3.4 *	24.2 *	33.4	14.9	3.5	3.2	
Barium	5600	b	245000	c	32.4	65.4	36.3	53.1	28	18.2	131	73.5	53.2	59.1	
Cadmium	80	b	3500	c	0.18	0.32	0.22	0.12	0.17	0.1	11.6	2.28	0.1	0.11	
Chromium	240	b	10500	c	38.5	35.2	25.2	33	28.9	9.1	90.8	43.2	34.3 *	30.4 *	
Cobalt	1564.3	d	20440	d	12.5	11	13.4	11.4	9.3	2.5	16.6	8.2	28.6	10	
Copper	2960	b	129500	c	59.6 *	104 *	32.5 N	36 N	28.3 *	132 *	219	103	36.7	36.4	
Lead	250	a	1000	a	16.8 *	43.3 *	14.8	11.7	199	16.8 *	316 *	220	111	7.26	13.8
Manganese	11200	b	490000	c	252 N	344 N	199	416	298 N	72.5 N	896	440	566 *	389 *	
Mercury	24	b	1050	c	0.64	0.1	0.08	0.09	0.04	3.71	2.91	0.37	0.02 B	0.03	
Nickel	1600	b	70000	c	49.8	46.2	44.9 *	35.9 *	30.1	17	169	77.3	45.4	42.2	
Selenium	400	b	17500	c	0.3 B	0.4 B	0.2 U	0.2 U	0.2 U	0.4 B	0.2 U	0.3 B	0.2 U	0.2 U	
Silver	400	b	17500	c	0.06	0.3	0.05 N	0.04 N	0.05	0.04	0.41	0.17	0.14 N	0.06 N	
Thallium	5.6	b	245	c	0.12	0.05	0.1	0.03	0.05	0.1	0.05	0.04	0.04	0.05	
Vanadium	560	b	24500	c	49.5	60.1	44.2	72.6	57.8	6.1	198	101	56.7 *	49.9 *	
Zinc	24000	b	1050000	c	60.2 *	211 *	71.5 *	42.3 *	48.5 *	9.6 *	3310	1110	54	46	

Notes: a - Criteria based on Ecology's Method A.

b - Criteria based on Ecology's Method B
and assuming unrestricted exposure parameters.

c - Criteria based on Ecology's Method C
and assuming industrial exposure parameters.

d - Criteria based on EPA Region III Risk Based Screening Crit

Bold – concentrations exceeding unrestricted criteria

Bold Italic – concentrations exceeding industrial criteria

**Table E-2. Dioxins/Furans Chemical Concentrations (ppt)
in Soils from the 2003 Remedial Investigation.**

Analyte	Criteria ¹		AP03		BL20		BP20	
	Unrestricted	Industrial	0-3"	3"-GW	0-3"	3"-GW	0-3"	3"-GW
1,2,3,4,6,7,8-HpCDD	667	87500	2428.72	307.52	1076.38	147.22	19312.51	1587.6
1,2,3,4,6,7,8-HpCDF	667	87500	394.02	49.32	186.71	133.93	930.44	106.54
1,2,3,4,7,8,9-HpCDF	667	87500	25.41 J	2.79 J	16.87	25.73	85.71 J	8.29
1,2,3,4,7,8-HxCDD	66.7	8750	6.85 J,K	2.67 J	7.92	1.17 J,K	143.74 J	18.53
1,2,3,4,7,8-HxCDF	66.7	8750	40.07	4.79 J	35 K	53.63	111.1 J,K	22.07
1,2,3,6,7,8-HxCDD	66.7	8750	84.96	12.24	84.61	10.6	467.81	66.02
1,2,3,6,7,8-HxCDF	66.7	8750	8.71 J	2.18 J,K	8.5 K	9.19	46.15 J	11.63
1,2,3,7,8,9-HxCDD	66.7	8750	16.5 J	6.48	31.89	6.94	353.41	48.81
1,2,3,7,8,9-HxCDF	66.7	8750	9.62 J,K	0.31 J,K	1.2 U	0.38 U	5.59 U	0.74 J
1,2,3,7,8-PeCDD	13.34	1750	5.28 J	2.11 J	7.26	1.48 J	102.54 J	18.81
1,2,3,7,8-PeCDF	133.4	17500	5.51 J,K	2.59 J,K	10.52 K	4.07 J,K	65.79 J,K	13.76 K
2,3,4,6,7,8-HxCDF	66.7	8750	16.92 J	3.04 J	12.27 K	9.46	61.99 J,K	11.48 K
2,3,4,7,8-PeCDF	13.34	1750	11.61 J	4.37 J	17.94 K	9.51	88.5 J,K	16.6 K
2,3,7,8-TCDD	6.67	875	2.39 U	0.26 U	1.56	0.36 J	18.88 J,K	4.09
2,3,7,8-TCDF	66.7	8750	6.23 C	4.09 C	31.56 C	8.53 C,K	98.33 C	20.72 C
OCDD	6670	875000	27212.84 B	3544.08	7789.18 E	1031.49 B	139582.99 B	9472.39 B,E
OCDF	6670	875000	2031.32	285.44	450.47	222.73 B	6795.81 B	496.28 K
TCDD TEQ (rl=-0)			85.432	14.378	56.899	20.325	595.608	69.476
TCDD TEQ (rl=1/2)			86.627	14.507	56.96	20.344	595.887	69.476
HpCDDs (total)			4704.12	275.82	2121.12	275.82	33214	2857.78
HpCDFs (total)			1833.92	279.44	638.04	279.44	4559.46	448.31
HxCDDs (total)			373.95	109.62	764.31	109.62	6255.03	1153.64
HxCDFs (total)			490.13	156.86	332.92	156.86	868.69	177.36
PeCDDs (total)			35.19	27.15	346.05	27.15	4705.41	772.43
PeCDFs (total)			133.87	105.49	212.03	105.49	741.87	198.48
TCDDs (total)			22.4	60.1	334.11	60.1	3224.4	491.86
TCDFs (total)			10.65	35.71	204.31	35.71	1132.47	135.12

Notes:

Bold – concentrations exceeding unrestricted criteria.

Bold Italic – concentrations exceeding industrial criteria.

**Table E-2. Dioxins/Furans Chemical Concentrations (ppt)
in Soils from the 2003 Remedial Investigation.**

Analyte	Criteria ¹		CS20		DB21		DK20		ECO20	ECO21
	Unrestricted	Industrial	0-3"	3"-GW	0-3"	3"-GW	0-3"	3"-GW		
1,2,3,4,6,7,8-HpCDD	667	87500	28.4	31.06	5197.73	566.02	1318.33	192.79	16.22	24.07
1,2,3,4,6,7,8-HpCDF	667	87500	4.97	4.64	617.53	134.88	115.55	38.84	3.33 J	4.45 J
1,2,3,4,7,8,9-HpCDF	667	87500	0.38 U	0.9 U	36.52 K	7.04	6.95	2.48 J	0.33 U	0.35 U
1,2,3,4,7,8-HxCDD	66.7	8750	0.16 U	0.21 U	44.4	15.69	15.44	8.39	1.44 J	0.8 J,K
1,2,3,4,7,8-HxCDF	66.7	8750	0.43 J	0.14 U	42.14	18.65	18.49 K	11.08 K	1.18 J,K	0.62 J
1,2,3,6,7,8-HxCDD	66.7	8750	1.02 J,K	0.81 J	212.26	44.08	162.87	20.81	2.84 J	2.26 J
1,2,3,6,7,8-HxCDF	66.7	8750	0.1 U	0.13 U	13.54 J	8.75	8.83	4.8	0.72 J	0.37 J,K
1,2,3,7,8,9-HxCDD	66.7	8750	0.32 J,K	0.27 J	71.1	31.18	79.37	18.56	3.74 J	2.03 J
1,2,3,7,8,9-HxCDF	66.7	8750	0.12 U	0.18 U	3.83 U	0.28 J,K	0.4 U	0.37 U	0.12 U	0.13 U
1,2,3,7,8-PeCDD	13.34	1750	0.13 U	0.17 U	19.46 J	12.3	18.72	10.73	1.67 J	1.03 J
1,2,3,7,8-PeCDF	133.4	17500	0.08 U	0.14 U	6.08 J,K	9.76 K	15.18 K	7.09 K	1.38 J,K	0.58 J
2,3,4,6,7,8-HxCDF	66.7	8750	0.1 U	0.13 U	27.1 J	9.61	11.37 K	4.74	0.83 J,K	0.38 J,K
2,3,4,7,8-PeCDF	13.34	1750	0.32 J	0.15 U	11.91 J	15.12 K	16.72	8.9	1.8 J	0.67 J,K
2,3,7,8-TCDD	6.67	875	0.13 U	0.12 U	2.18 U	2.5	4.63	2.87	0.55 J,K	0.79 J
2,3,7,8-TCDF	66.7	8750	0.54 U,C	0.54 U,C	6.28 C	11.86 C	79.23 C	13.79 C	2.27 C	0.9 CJ
OCDD	6670	875000	293.53	333.35	50916.93 E	3646.46	5786.61 B	1363.11 B	43.24 B	149.62 B
OCDF	6670	875000	26.52	24.91	2739.94	206.01	273.24 B	94.47 B	3.58 J	6.65 J
TCDD TEQ (rl=-0)			0.991	0.824	169.846	41.640	81.137	25.055	3.898	2.846
TCDD TEQ (rl=1/2)			1.143	1.04	171.127	41.640	81.157	25.074	3.906	2.855
HxCDDs (total)			49.3	58.2	8916.74	1145.49	2538.75	492.41	29.99	89.05
HxCDFs (total)			24.67	18.83	2471.02	340.76	382.13	113.94	7.13	9.95
HxCDDs (total)			8.07	3.69	905.33	880.57	1451.17	316.9	66.5	29.78
HxCDFs (total)			5.52	4.95	760.82	141.14	292.39	76.15	7.94	5.37
PeCDDs (total)			5.8	0.6	119.21	665.72	686.5	283.73	71.03	24.2
PeCDFs (total)			1.1	0.15 U	171.79	169.31	242.46	122.95	20.09	7.89
TCDDs (total)			4.31	0.8	78.62	417.67	624.32	195.25	70.26	18.04
TCDFs (total)			0.77	0.44	52.35	287.17	334.12	185.72	44.77	12.81

Notes:

Bold – concentrations exceeding unrestricted criteria.

Bold Italic – concentrations exceeding industrial criteria.

**Table E-2. Dioxins/Furans Chemical Concentrations (ppt)
in Soils from the 2003 Remedial Investigation.**

Analyte	Criteria ¹		ECO22	ECO23	ECO25	ECO26	ECO27	ECO28	ECO29	ECO30	ECO31
	Unrestricted	Industrial									
1,2,3,4,6,7,8-HpCDD	667	87500	69.79	23.8	9.27	53.78	90.86	65.93	23.32	126.7	12.29
1,2,3,4,6,7,8-HpCDF	667	87500	10.41	3.43 J	1.5 J	10.1	11.39	11.5	4.64 J	47.22	1.82 J
1,2,3,4,7,8,9-HpCDF	667	87500	0.62 J	0.61 U	0.53 U	0.57 J	0.76 U	0.62 U	0.55 U	1.17 J	0.28 U
1,2,3,4,7,8-HxCDD	66.7	8750	5.58	1.7 J	0.27 U	1.32 J	4.04 J	3.36 J	1.31 J	4.56 J	1.38 J
1,2,3,4,7,8-HxCDF	66.7	8750	3.34 J	0.97 J	0.46 J	2.05 J,K	3.7 J,K	3.12 J,K	1.11 J	3.41 J,K	0.63 J
1,2,3,6,7,8-HxCDD	66.7	8750	12.87	4.13 J	1.04 J	4.09 J	10.53	9.05	3.3 J	20.83	2.61 J
1,2,3,6,7,8-HxCDF	66.7	8750	2.09 J	0.56 J	0.17 U	0.88 J	2.39 J	1.83 J	0.69 J	1.96 J	0.34 J,K
1,2,3,7,8,9-HxCDD	66.7	8750	12.6	4.01 J	0.77 J	3.81 J	9.88	9.5	3.23 J	11.77	2.53 J
1,2,3,7,8,9-HxCDF	66.7	8750	0.19 J	0.2 U	0.23 U	0.19 J	0.16 U	0.1 U	0.14 U	0.49 U	0.22 U
1,2,3,7,8-PeCDD	13.34	1750	6.58	1.93 J	0.38 J,K	1.23 J	4.87 J	4.22 J	1.49 J	5.09 J	1.45 J
1,2,3,7,8-PeCDF	133.4	17500	3.46 J,K	0.93 J,K	0.24 U	1.06 J,K	4.16 J,K	3.22 J,K	1.26 J,K	3.3 J,K	0.59 J,K
2,3,4,6,7,8-HxCDF	66.7	8750	2.27 J,K	0.57 J,K	0.2 U	1.03 J,K	2.52 J,K	1.99 J,K	0.84 J	2.95 J	0.38 J
2,3,4,7,8-PeCDF	13.34	1750	4.48 J	1.08 J	0.24 U	1.36 J	5.22	3.88 J	1.6 J	3.92 J	0.75 J
2,3,7,8-TCDD	6.67	875	1.89	0.49 J,K	0.23 U	0.42 J,K	2.13	1.58	0.62 J	1.19 J	0.48 J,K
2,3,7,8-TCDF	66.7	8750	4.74 C	2.29 C	0.55 C	1.31 C	6.27 C	5.36 C	2.04 C	4.23 C	1.27 C
OCDD	6670	875000	217.31 B	96.46	57.28	382.57 B	237.39 B	325.94 B	87.85 B	341.92	43.44
OCDF	6670	875000	20.07	5.82 J	4.57 J	28.13	15.81	22.73	7.6 J	40.28	2.56 J
TCDD TEQ (rl=-0)			13.007	3.839	0.642	4.291	12.592	10.335	3.855	12.964	2.711
TCDD TEQ (rl=1/2)			13.007	3.852	0.869	4.291	12.604	10.343	3.865	12.989	2.723
HpCDDs (total)			133.59	47.68	20.23	121.88	176.09	140.2	45.06	211.34	23.89
HpCDFs (total)			23.88	8.78	4.19	29.22	24.31	29.99	9.86	133.48	3.86
HxCDDs (total)			223.35	66.47	11.62	64.06	300.87	144.06	52.02	236.46	49.18
HxCDFs (total)			24.81	7.78	2.46	14.64	27.94	25.23	9.95	72.29	3.68
PeCDDs (total)			229.02	67.3	6.11	44.43	299.73	149.09	51.77	173.81	46.39
PeCDFs (total)			49.81	12.88	1.18	15.83	65.52	53.21	20.16	47.13	6.87
TCDDs (total)			170.67	58.91	6.91	34.54	203.3	129.48	39.61	168.9	40.37
TCDFs (total)			87.98	14.3	3.63	23.87	145.49	124.09	37.99	67.03	16.24

Notes:

Bold – concentrations exceeding unrestricted criteria.

Bold Italic – concentrations exceeding industrial criteria.

**Table E-2. Dioxins/Furans Chemical Concentrations (ppt)
in Soils from the 2003 Remedial Investigation.**

Analyte	Criteria ¹		ECO32	ECO33	ECO34	ECO35	FR02		FR20	
	Unrestricted	Industrial					0-3"	3"-GW	0-3"	3"-GW
1,2,3,4,6,7,8-HpCDD	667	87500	63.39	1318.16	1220.96	735.31	5451.39	2115.791 E	2812.45	474.03
1,2,3,4,6,7,8-HpCDF	667	87500	10.48	186.96	147.87	573.54	895.99	251.143	272.88	43.54
1,2,3,4,7,8,9-HpCDF	667	87500	0.78 J,K	9.99	7.07	15.45	78.2 J	28.042	21.84 J	3.98 J
1,2,3,4,7,8-HxCDD	66.7	8750	5.76	34.24	5.42 J,K	11.8	43.59 J	19.215	10.8 J	7.24
1,2,3,4,7,8-HxCDF	66.7	8750	4.67 J,K	31.49 K	9.08	14.03 K	54.83 J	15.373 K	16.34 J	5.93 K
1,2,3,6,7,8-HxCDD	66.7	8750	10.1	132.25	47.25	62.58	142.6	56.486	72.31	28.6
1,2,3,6,7,8-HxCDF	66.7	8750	2.76 J	15.85	3.84 J	8.46	19.05 J	5.978	5.13 J	2.57
1,2,3,7,8,9-HxCDD	66.7	8750	10.8	83.94	17.96	30.87	56.04 J	38.014	12.52 J,K	17.8
1,2,3,7,8,9-HxCDF	66.7	8750	0.17 J,K	1.95 J	0.5 U	0.47 U	3.82 U	0.297 J,K	1.97 U	0.21 U
1,2,3,7,8-PeCDD	13.34	1750	6.35	41.08	3.54 J	10.39	12.09 J,K	7.257	5.41 J	6.31
1,2,3,7,8-PeCDF	133.4	17500	4.85 J,K	28.15 K	3.27 K	5.32 J,K	5.44 J,K	4.324 J,K	2.89 J,K	3.6 J,K
2,3,4,6,7,8-HxCDF	66.7	8750	2.97 K	17.46 K	6.77	16.41 K	39.58 J	10.875	8.39 J,K	3.4 J
2,3,4,7,8-PeCDF	13.34	1750	6.24	30.12 K	4.06 J	6.2	10.95 J	5.566 K	3.02 J	5.06 K
2,3,7,8-TCDD	6.67	875	1.93 K	11.18	0.65 J,K	4.86	4.5 U	1.282	1.62 U	1.41
2,3,7,8-TCDF	66.7	8750	10.23 C	76.37 C	2.26 C	10.04 C	13.08 CJ	12.406 C	8.14 C	7.51 C
OCDD	6670	875000	202.73	6991.46	11270.94 E	3938.63	51174.2 B	19639.074 E	51223.68 B,E	5766.62
OCDF	6670	875000	16.1	513.98	596.32	995.92	4190.24	1505.022	1747.57	238.9
TCDD TEQ (rl=-0)			14.179	110.199	39.498	47.018	168.289	68.868	101.765	25.801
TCDD TEQ (rl=1/2)			14.179	110.199	39.523	47.041	170.73	68.868	102.674	25.812
HpCDDs (total)			118.22	2643.41	5113.66	1287.51	8117.93	3117.581	5302.6	864.2
HpCDFs (total)			24.39	682.41	569.91	1934.34	3025.37	1091.98	1295.74	204.1
HxCDDs (total)			254.68	1478.96	387.02	578.84	942.54	438.88	290.05	366.75
HxCDFs (total)			31.8	440.64	121.7	584.2	698.39	216.148	280.3	63.43
PeCDDs (total)			265.83	1276.17	51.98	405.85	271.38	314.496	46.56	352.73
PeCDFs (total)			65.99	368.34	64.96	106.92	102.14	78.145	71.1	56.96
TCDDs (total)			294.56	1484.84	39.19	346.06	411.27	302.211	33.19	373.03
TCDFs (total)			90.33	515.89	35.72	108.57	8.26	81.991	8.35	98.74

Notes:

Bold – concentrations exceeding unrestricted criteria.

Bold Italic – concentrations exceeding industrial criteria.

**Table E-2. Dioxins/Furans Chemical Concentrations (ppt)
in Soils from the 2003 Remedial Investigation.**

Analyte	Criteria ¹				LY20		LY21		LY22		LY23		LY24	
	Unrestricted	Industrial	0-3"	3"-GW	0-3"	3"-GW	0-3"	3"-GW	0-3"	3"-GW	0-3"	3"-GW	0-3"	3"-GW
1,2,3,4,6,7,8-HpCDD	667	87500	122.64	4.13 J	12692.15	636.78	55.71	14.35	3.5 J	13.91	17.17	14.31		
1,2,3,4,6,7,8-HpCDF	667	87500	14.68	0.42 J	1198.94	0.85 U	7.74	3.48 J	0.95 U	3.32 J	2.28 U	5.04		
1,2,3,4,7,8,9-HpCDF	667	87500	0.76 J	0.14 U	108.34	3.88 J	0.54 U	2.59 U	1.92 U	1.96 U	3.66 U	0.84 U		
1,2,3,4,7,8-HxCDD	66.7	8750	7.98	0.31 J	911.49	45.21	2.78 J,K	1 U	0.69 U	0.51 U	2.07 U	0.62 J		
1,2,3,4,7,8-HxCDF	66.7	8750	5.89 K	0.35 J	398.64 K	19.52 K	2.36 J,K	0.73 U	0.41 U	1.56 J,K	1.15 U	2.48 J		
1,2,3,6,7,8-HxCDD	66.7	8750	17.45	0.77 J,K	1740.46	114.05	7.61	1.14 U	0.74 U	0.6 U	2.39 U	1.73 J		
1,2,3,6,7,8-HxCDF	66.7	8750	3.27 J	0.15 J	239.98	14.07	1.18 J	0.74 U	0.43 U	0.37 U	1.15 U	1.09 J		
1,2,3,7,8,9-HxCDD	66.7	8750	17.92	0.77 J	1663.32	68.93	4.89 J	1.05 U	0.67 U	0.54 U	2.18 U	1.77 J		
1,2,3,7,8,9-HxCDF	66.7	8750	0.16 J	0.05 U	46.02 J	1.11 J,K	0.11 U	1.06 U	0.69 U	0.59 U	1.68 U	0.19 U		
1,2,3,7,8-PeCDD	13.34	1750	8.58	0.38 J	985.12	43.55	3.11 J	0.73 U	0.28 U	0.24 U	5.04	1.03 J		
1,2,3,7,8-PeCDF	133.4	17500	4.34 K	0.23 J,K	417.87 K	19.67	2.1 J,K	0.46 U	0.24 U	0.99 J	2.3 J	1.73 J		
2,3,4,6,7,8-HxCDF	66.7	8750	3.13 K	0.17 J	311.84 K	14.11	1.34 J	0.81 U	0.45 U	0.41 U	1.32 U	1.21 J		
2,3,4,7,8-PeCDF	13.34	1750	5.53	0.42 J,K	597.5	30.85 K	2.19 J,K	0.87 J,K	0.22 U	1.81 J	2.7 J	2.61 J		
2,3,7,8-TCDD	6.67	875	1.79	0.12 J,K	220.13	12.65 K	0.74 J,K	0.32 U	0.18 U	0.11 U	0.44 U	0.36 J,K		
2,3,7,8-TCDF	66.7	8750	4.84 C	0.88 C	390.54 C,E	31.14 C	2.6 C	1.5 C	0.38 J	1.5 C	4.5 C	2.77 C		
OCDD	6670	875000	537.74	8.99	53752.1 B	1650.27	285.27	88.17 B	18.38	195.68 B	11.9 U	89.06		
OCDF	6670	875000	19.02	0.59 J	3291.74 B	83.22	21.76	8.94 J,K	5.18 U	32.03	12.38 U	7.04		
TCDD TEQ (rl=-0)			17.064	0.927	1799.601	89.788	6.713	0.86	0.091	1.661	4.607	3.723		
TCDD TEQ (rl=1/2)			17.064	0.930	1799.601	89.792	6.721	1.554	0.533	1.936	5.466	3.737		
HpCDDs (total)			366.23	8.53	23211.96	1253.77	135.64	14.35	8.49	31.01	17.17	33.5		
HpCDFs (total)			32.3	0.74	3620.77	149.12	23.7	9.48	0.95 U	15.83	2.28 U	9		
HxCDDs (total)			245.28	25.69	25842.62	2048.94	128.8	32.28	8.11	16.21	77.77	37.37		
HxCDFs (total)			35.74	1.34	3113.33	115.78	17.77	0.73 U	0.56	3.63	5.69	8.27		
PeCDDs (total)			190.1	31.13	24177.57	1652.33	110.94	40.77	0.28 U	14.83	50.91	34.75		
PeCDFs (total)			60.16	3.37	5252.74	192.47	23.04	8.95	2.29	22.77	28.09	22.55		
TCDDs (total)			97.34	25.14	22262.48	1808.67	92.05	26.95	0.29	15.87	77.77	30.88		
TCDFs (total)			70.61	11.06	7550.51	374.35	38.29	14.56	1.37	17.7	17.7	30.64		

Notes:

Bold – concentrations exceeding unrestricted criteria.

Bold Italic – concentrations exceeding industrial criteria.

**Table E-2. Dioxins/Furans Chemical Concentrations (ppt)
in Soils from the 2003 Remedial Investigation.**

Analyte	Criteria ¹				LY25	MR20	MS20		PC20		PC20 (conc)
	Unrestricted	Industrial	0-3"	3"-GW			0-3"	3"-GW	0-3"	3"-GW	
1,2,3,4,6,7,8-HpCDD	667	87500	39.24	4.11 J	256.02	69.31	21.26	1200.92	103.96	7391.06	
1,2,3,4,6,7,8-HpCDF	667	87500	7.24	0.22 U	96.59	16.69	16.28	174.86	21.04	895.75	
1,2,3,4,7,8,9-HpCDF	667	87500	0.69 U	0.37 U	23.13	1.52 J	0.55 J,K	8.65	1.91 J	54.89 J,K	
1,2,3,4,7,8-HxCDD	66.7	8750	0.23 U	0.18 U	1.11 U	1.68 J	0.58 J	3.7 J	0.83 J	25.79 J	
1,2,3,4,7,8-HxCDF	66.7	8750	1.11 J	0.15 U	48.77	2.25 J	1.65 J	15.06	5.54	69.13 J,K	
1,2,3,6,7,8-HxCDD	66.7	8750	2.13 J	0.2 U	38.04	5.67	1.81 J	50.91	4.91 J	247.68	
1,2,3,6,7,8-HxCDF	66.7	8750	0.21 U	0.15 U	5.32	1.39 J	0.9 J	4.97	1.27 J	20.11 J	
1,2,3,7,8,9-HxCDD	66.7	8750	1.17 J,K	0.18 U	12.3	5.42	1.49 J	12.83	3.03 J	57.26 J,K	
1,2,3,7,8,9-HxCDF	66.7	8750	0.33 U	0.22 U	0.49 U	0.26 U	0.05 U	1.2 U	0.15 U	23.67 U	
1,2,3,7,8-PeCDD	13.34	1750	0.15 U	0.1 U	1.51 J	1.73 J	0.51 J,K	2.15 J	0.67 J	7.81 U	
1,2,3,7,8-PeCDF	133.4	17500	0.14 U	0.15 U	6.19	1.16 J,K	0.71 J,K	4.47	2.37 J	19.25 J,K	
2,3,4,6,7,8-HxCDF	66.7	8750	0.2 U	0.15 U	6.29	1.8 J	1.21 J	8.37	2.08 J	28.17 J,K	
2,3,4,7,8-PeCDF	13.34	1750	0.14 U	0.16 U	11.61	1.43 J	1.1 J	4.78	4.8 J	24.95 J,K	
2,3,7,8-TCDD	6.67	875	0.1 U	0.09 U	0.37 U	0.28 J,K	0.29 J	0.32 J	0.07 U	7.43 U	
2,3,7,8-TCDF	66.7	8750	0.44 J	0.32 J	39.4 C	1.27 C	1.02 C	2.64 C	3.33 C	21.55 C	
OCDD	6670	875000	396.49	13.56	1608.61	586.37 B	147.02 B	14635.26 E	1034.76	105356.28 B	
OCDF	6670	875000	21.83	1 U	221.26	42.48	17.43	396.28	54.2	3411.39	
TCDD TEQ (rl=-0)			1.368	0.087	27.469	5.37	2.542	42.732	7.311	252.591	
TCDD TEQ (rl=1/2)			1.546	0.265	27.734	5.383	2.544	42.792	7.353	259.442	
HpCDDs (total)			87.17	4.11	433.03	142.39	46.74	2552.88	237.84	14160.96	
HpCDFs (total)			23.82	0.22 U	272.77	52.77	37.14	715.81	73.04	3635.36	
HxCDDs (total)			16.63	11.07	308.03	102.5	32.23	221.48	38.2	874.27	
HxCDFs (total)			10.14	0.15 U	149.02	23.25	16.28	321.59	41.83	1507.61	
PeCDDs (total)			8.53	7.96	23.76	90.31	32.32	24.53	9.7	7.81 U	
PeCDFs (total)			2.07	0.63	122.47	17	14.57	98.24	44.2	399.7	
TCDDs (total)			5.4	5.59	61.99	58.28	23.06	8.35	9.24	7.43 U	
TCDFs (total)			1.94	0.87	114.5	17.95	18.76	15.73	18.42	12.96	

Notes:

Bold – concentrations exceeding unrestricted criteria.

Bold Italic – concentrations exceeding industrial criteria.

**Table E-2. Dioxins/Furans Chemical Concentrations (ppt)
in Soils from the 2003 Remedial Investigation.**

Analyte	Criteria ¹		PS20		RB21		RS20		SSL20
	Unrestricted	Industrial	0-3"	3"-GW	0-3"	3"-GW	0-3"	3"-GW	0-3"
1,2,3,4,6,7,8-HpCDD	667	87500	2.71 J	0.62 J	2068.24	55.27	2.5 J	22.29	555.55
1,2,3,4,6,7,8-HpCDF	667	87500	0.65 J,K	0.24 U	313.23	8.91	1.94 J	5.59	51.35
1,2,3,4,7,8,9-HpCDF	667	87500	0.77 U	0.41 U	18.01 J	1.89 U	0.68 U	0.42 U	2.38 J,K
1,2,3,4,7,8-HxCDD	66.7	8750	0.38 U	0.24 U	48.18	2.4 J	0.33 J,K	1.03 J	11.11
1,2,3,4,7,8-HxCDF	66.7	8750	0.22 U	0.15 U	39.56	1.79 J	0.53 J,K	0.98 J	9.18 K
1,2,3,6,7,8-HxCDD	66.7	8750	0.44 U	0.27 U	139.59	5.35	0.33 J,K	2.47 J	41.56
1,2,3,6,7,8-HxCDF	66.7	8750	0.22 U	0.14 U	16.72 J	0.82 J	0.24 U	0.53 J	4.13 J
1,2,3,7,8,9-HxCDD	66.7	8750	0.4 U	0.25 U	106.16	4.56	0.33 U	2.2 J	39.69
1,2,3,7,8,9-HxCDF	66.7	8750	0.32 U	0.2 U	1.22 J,K	0.39 U	0.39 U	0.21 U	0.66 U
1,2,3,7,8-PeCDD	13.34	1750	0.27 U	0.18 U	47.38	1.9 J,K	0.42 U	0.76 J,K	10.84
1,2,3,7,8-PeCDF	133.4	17500	0.22 U	0.16 U	21 J	1.02 J	0.24 U	0.91 J,K	4.54 K
2,3,4,6,7,8-HxCDF	66.7	8750	0.24 U	0.16 U	22 J	0.84 J	0.3 U	0.53 J,K	5.17 K
2,3,4,7,8-PeCDF	13.34	1750	0.23 U	0.18 U	26.55 J	1.32 J,K	0.27 U	1.2 J	5.55
2,3,7,8-TCDD	6.67	875	0.21 U	0.22 U	7.56 J,K	0.4 J,K	0.27 U	0.35 J	1.66
2,3,7,8-TCDF	66.7	8750	0.24 U	0.22 U	31.97 C	1.82 C	0.83 U,C	2.04 C	5.11 C
OCDD	6670	875000	24.95 B	3.01 B,J	17031.63 B	378.78 B	10.45 B,J	114.26	3166.79
OCDF	6670	875000	3.55 B,J	0.78 B,J	893.87 B	19.78	3.5 B,J	16.86	54.59
TCDD TEQ (rl=-0)			0.062	0.010	128.035	4.859	0.152	2.763	30.991
TCDD TEQ (rl=1/2)			0.424	0.299	128.035	4.888	0.599	2.776	31.024
HxCDDs (total)			6.32	1.18	3886.81	112.67	4.88	46.66	1432.47
HxCDFs (total)			1.15	0.24 U	1026.66	23.24	1.94	18.35	118.78
HxCDDs (total)			0.4 U	0.42	1165.35	90.35	6.98	58.69	383.85
HxCDFs (total)			0.36	0.15 U	405.17	17.1	0.67	6.52	96.12
PeCDDs (total)			0.53	0.18 U	1055.28	77.04	5.83	62.75	210.79
PeCDFs (total)			0.23 U	0.18 U	334.27	16.71	0.27 U	12.88	89.7
TCDDs (total)			0.21 U	0.22 U	590.45	54.01	3.44	66.23	111.39
TCDFs (total)			0.24 U	0.22 U	319.57	18.99	0.27 U	24.93	93.01

Notes:

Bold – concentrations exceeding unrestricted criteria.

Bold Italic – concentrations exceeding industrial criteria.

**Table E-2. Dioxins/Furans Chemical Concentrations (ppt)
in Soils from the 2003 Remedial Investigation.**

Analyte	Criteria ¹		SSL21	SL22		SR03		SR20	
	Unrestricted	Industrial	0-3"	0-3"	3"-GW	0-3"	3"-GW	0-3"	3"-GW
1,2,3,4,6,7,8-HxCDD	667	87500	1541.44	3.39 J	5.77	52080.64	6674.65	3747.95	1671.56
1,2,3,4,6,7,8-HxCDF	667	87500	194.59	0.52 J	0.9 J	6331.92	850.38	460.36	270.13
1,2,3,4,7,8,9-HxCDF	667	87500	18.42	0.31 U	0.13 U	499.32	62.2	25.68 J	12.15 K
1,2,3,4,7,8-HxCDD	66.7	8750	26.45	0.16 U	0.22 J,K	303.37 J	43.66	17.12 J,K	28.27
1,2,3,4,7,8-HxCDF	66.7	8750	15.3 K	0.13 U	0.17 J,K	337	44.62	49.98	28.62
1,2,3,6,7,8-HxCDD	66.7	8750	72.37	0.17 U	0.69 J	2827.54	382.88	7.59 J	3.14 J
1,2,3,6,7,8-HxCDF	66.7	8750	14.98	0.12 U	0.06 U	141.1	19.1 J	11.76 J	9.38
1,2,3,7,8,9-HxCDD	66.7	8750	62.74	0.16 U	0.6 J,K	768.73	73.16	127.06	106.22
1,2,3,7,8,9-HxCDF	66.7	8750	0.42 U	0.18 U	0.06 U	74.32 J,K	14.33 J	9.86 J,K	1.31 J
1,2,3,7,8-PeCDD	13.34	1750	22.42	0.13 U	0.33 J,K	106.25 J	18.84 J	3.41 J,K	2.7 J
1,2,3,7,8-PeCDF	133.4	17500	6.23 K	0.15 U	0.06 U	85.95 J	12.63 J	14.79 J	8.19 K
2,3,4,6,7,8-HxCDF	66.7	8750	14.84 K	0.11 U	0.05 U	342.32	44.96	18.16 J,K	14.09
2,3,4,7,8-PeCDF	13.34	1750	6.08	0.18 J	0.05 U	87.15 J	11.45 J	15.42 J	9.82
2,3,7,8-TCDD	6.67	875	6.26	0.1 U	0.09 U	3.61 J,K	1.21 J,K	1.89 U	0.72 J
2,3,7,8-TCDF	66.7	8750	3.32 C	0.26 U	0.25 U	51.04 C	7.17 C	16.42 C	8.17 C
OCDD	6670	875000	12700.75 E	27.35	32.68 B	311155.55 B,E	40317.23 B,E	60079.17 B,E	19097.66 E
OCDF	6670	875000	546.31	1.54 J	1.99 J	14704.65	2078.07	1722.02	533.7
TCDD TEQ (rl=-0)			72.613	0.158	0.346	1504.129	198.242	140.091	66.479
TCDD TEQ (rl=1/2)			72.634	0.310	0.515	1504.129	198.242	141.036	66.479
HxCDDs (total)			2892.26	6.33	13.43	96851.41	14121.47	7483.93	3245.9
HxCDFs (total)			557.52	1.21	2.61	23830.81	3098.83	1907.38	1025.02
HxCDDs (total)			614.99	6.15	8.46	9276.18	1439.8	527.51	600.16
HxCDFs (total)			194.46	0.12 U	0.96	9662.81	1166.31	871.85	599.16
PeCDDs (total)			214.11	4.82	9.47	602.86	155.23	6.68	77.14
PeCDFs (total)			143.65	0.53	0.94	1770.34	292.27	249.99	173.51
TCDDs (total)			94.16	2.18	6.09	302.61	104.63	5.11	59.29
TCDFs (total)			69.06	0.48	0.57	10.33 U	9.85	23.58	54.23

Notes:

Bold – concentrations exceeding unrestricted criteria.

Bold Italic – concentrations exceeding industrial criteria.

**Table E-2. Dioxins/Furans Chemical Concentrations (ppt)
in Soils from the 2003 Remedial Investigation.**

Analyte	Criteria ¹		SR21		SR22		SR23		SR24	
	Unrestricted	Industrial	0-3"	3"-GW	0-3"	3"-GW	0-3"	3"-GW	0-3"	3"-GW
1,2,3,4,6,7,8-HpCDD	667	87500	795.65	31.25	145.57	137.54	11477.16	201.9	1749.93	12.96
1,2,3,4,6,7,8-HpCDF	667	87500	121.56	7.25	18.46	15.83	1919.85	39.8	233.82	3.23 J
1,2,3,4,7,8,9-HpCDF	667	87500	8.79	0.42 J,K	0.86 J,K	1.18 U	134.94 J	1.27 J	18.48 J	0.35 U
1,2,3,4,7,8-HxCDD	66.7	8750	7.7	0.65 J	1.03 J	0.64 J	110.36 J	0.13 U	10.88 J	0.17 U
1,2,3,4,7,8-HxCDF	66.7	8750	12.24 K	0.98 J,K	1.07 J	1.84 J	122.53 J	2.33 J	5.2 J	6.1
1,2,3,6,7,8-HxCDD	66.7	8750	43.48	2.37 J	5.73 J	3.92 J,K	37.23 J	12.41	54.17 J	0.54 U
1,2,3,6,7,8-HxCDF	66.7	8750	5.06	0.46 J,K	0.53 J,K	0.82 J	47.29 J	1.03 J	5.2 J	0.84 J
1,2,3,7,8,9-HxCDD	66.7	8750	21.89	1.63 J	2.7	2.07 J	612.09	2.92 J	27.01	0.17 J,K
1,2,3,7,8,9-HxCDF	66.7	8750	0.15 U	0.4 J,K	0.19 U	0.22 U	26.7 J,K	0.41 U	7.92 J,K	0.18 U
1,2,3,7,8-PeCDD	13.34	1750	6.12	0.72 J	0.67 J	0.57 J	18.97 U	0.45 J	6 J	0.14 U
1,2,3,7,8-PeCDF	133.4	17500	4.47 J,K	0.64 J	0.25 J,K	0.67 J	19.88 U	0.96 J	3.72 J	2.55 J
2,3,4,6,7,8-HxCDF	66.7	8750	7.44 K	0.61 J	0.88 J,K	1.29 J	94.25 J	1.9 J	9.89 J	1.56 J
2,3,4,7,8-PeCDF	13.34	1750	5.93	0.78 J	0.49 J,K	1.27 J	25.35 J	1.1 J	5.6 J	6.55
2,3,7,8-TCDD	6.67	875	1.04	0.27 J	0.13 U	0.25 J	38.79 U	0.1 J,K	0.93 U	0.08 U
2,3,7,8-TCDF	66.7	8750	5.75 C	1.67 C	0.47 U	0.82 C	30.87 U	0.72 C	4.37 C	2.65 C
OCDD	6670	875000	6741.36 B	246.88 B	1196.37 B	1131.83	68973.53 B	1355.74	19806.17 B	95.11
OCDF	6670	875000	419.32	21.9	62.87	45.19	5833.29	84.2	1071.66	7.12 J
TCDD TEQ (rl=-0)			34.065	2.587	4.695	5.054	327.846	6.924	59.350	4.799
TCDD TEQ (rl=1/2)			34.073	2.587	4.793	5.071	354.024	6.951	59.815	4.920
HpCDDs (total)			1393.58	54.37	307.54	328.5	17599.81	454.29	3209.11	23.63
HpCDFs (total)			474.34	26.66	66.2	51.62	7224.01	133.73	974.45	9.72
HxCDDs (total)			240.92	21.91	44.71	54.29	1943.72	52.21	278.75	1.21
HxCDFs (total)			173.75	9.7	21.75	25.26	2849.46	62.37	260.48	16.55
PeCDDs (total)			150.7	22.91	20.46	26.6	18.97 U	4.87	33.65	0.57
PeCDFs (total)			70.69	8.03	9.14	18.77	438.28	22.09	86.87	51.05
TCDDs (total)			91.62	19.15	14.34	24.41	38.79 U	1.97	15.53	0.54
TCDFs (total)			50.9	14.11	2.33	19.05	30.87 U	3.03	12.64	18.94

Notes:

Bold – concentrations exceeding unrestricted criteria.

Bold Italic – concentrations exceeding industrial criteria.

**Table E-2. Dioxins/Furans Chemical Concentrations (ppt)
in Soils from the 2003 Remedial Investigation.**

Analyte	Criteria ¹		WM20		WM21	
	Unrestricted	Industrial	0-3"	3"-GW	0-3"	3"-GW
1,2,3,4,6,7,8-HpCDD	667	87500	5391.24	1681.29	12.16 J	12.94 J
1,2,3,4,6,7,8-HpCDF	667	87500	600.86	205.2	1.18 J	1.64 J
1,2,3,4,7,8,9-HpCDF	667	87500	49.15 J	15.16	0.52 U	0.52 U
1,2,3,4,7,8-HxCDD	66.7	8750	31.5 J	24.11	0.29 U	0.27 U
1,2,3,4,7,8-HxCDF	66.7	8750	57.59 J	66.15 K	0.21 U	0.28 U
1,2,3,6,7,8-HxCDD	66.7	8750	208.55	91.96	0.32 U	0.31 U
1,2,3,6,7,8-HxCDF	66.7	8750	19.94 J	15.82	0.21 U	0.27 U
1,2,3,7,8,9-HxCDD	66.7	8750	93.42	42.29	0.29 U	0.28 U
1,2,3,7,8,9-HxCDF	66.7	8750	6.55 U	1.5 U	0.34 U	0.39 U
1,2,3,7,8-PeCDD	13.34	1750	23.18 J	24.63	0.26 U	0.26 U
1,2,3,7,8-PeCDF	133.4	17500	19.52 J	39.32 K	0.24 U	0.21 U
2,3,4,6,7,8-HxCDF	66.7	8750	33.23 J	23.34 K	0.21 U	0.25 U
2,3,4,7,8-PeCDF	13.34	1750	24.08 J	77.27	0.23 U	0.21 U
2,3,7,8-TCDD	6.67	875	3.88 J,K	4.85	0.27 U	0.27 U
2,3,7,8-TCDF	66.7	8750	23.09 C	78.98 C	0.33 U	0.36 C,J
OCDD	6670	875000	65502.54 B	17354.67 B,E	82.79	99.77
OCDF	6670	875000	2797.48 B	981.76	3.96 J,K	3.78 J,K
TCDD TEQ (rl=-0)			203.931	129.384	0.220	0.285
TCDD TEQ (rl=1/2)			204.258	129.459	0.596	0.648
HxCDDs (total)			11265.41	3648.3	65.9	68.3
HxCDFs (total)			2623.31	916.34	3.23	4.29
HxCDDs (total)			1234.13	1247.48	8.73	15.23
HxCDFs (total)			824.94	513.21	1.31	1.04
PeCDDs (total)			533.98	1361.82	1.11	11.15
PeCDFs (total)			345.94	484.81	0.23 U	0.69
TCDDs (total)			316.63	1791.69	0.89	8.48
TCDFs (total)			79.17	1133.63	0.33 U	0.73

Notes:

Bold – concentrations exceeding unrestricted criteria.

Bold Italic – concentrations exceeding industrial criteria.

Table E-3. Pesticide and Polychlorinated Biphenyl (PCB) Concentrations (ppb) in Soils from the 2003 Remedial Investigation.

Analyte	Criteria		ECO32	ECO33	ECO34	ECO35	RS20: 0 - 3"		RS21: 0 - 3"		WM20: 0 - 3"		WM21: 0 - 3"			
	Unrestricted	Industrial					0-3"	3"-GW	0-3"	3"-GW	0-3"	3"-GW	0-3"	3"-GW		
Aroclor 1016	550	a	66000	b	.0023 U	0.003	2.4 U	.0024 U	0.015 U,i	0.002 U	0.002 U	0.021 U	0.0027 U	0.0019 U	0.002 U	
Aroclor 1221	550	a	66000	b	.0023 U	0.099	2.4 U	.0024 U	0.088 U,i	0.002 U	0.002 U	0.021 U	0.0027 U	0.0019 U	0.002 U	
Aroclor 1232	550	a	66000	b	.0023 U	0.009	2.4 U	.0024 U	0.033 U,i	0.002 U	0.002 U	0.021 U	0.0027 U	0.0019 U	0.002 U	
Aroclor 1242	550	a	66000	b	.0023 U	0.013	2.4 U	.0024 U	0.026 U,i	0.002 U	0.002 U	0.021 U	0.0027 U	0.0019 U	0.002 U	
Aroclor 1248	550	a	66000	b	.0023 U	0.008	2.4 U	.0024 U	0.021 U,i	0.002 U	0.002 U	0.330 P,D	0.087	0.0019 U	0.002 U	
Aroclor 1254	550	a	66000	b	.0023 U	0.039	2.4 U	.0024 U	0.077 U,i	0.002 U	0.002 U	0.021 U	0.027 U	0.0019 U	0.0041 J	
Aroclor 1260	550	a	66000	b	0.021	0.044	36	0.018	0.082	0.006 J	0.002 U	0.0095 J	2.400 D	0.46	0.0019 U	0.002 U
Total PCBs (rl=1/2)	550	a	66000	b	0.0279	0.215	43.2	0.025	0.212	0.013	0.002 U	0.0155	2.7825	0.55375	0.0067 U	0.0101
4,4'-DDD	4.16	a	546.88	b					0.00013 U	0.0001 U	0.00009 U	0.00009 U				
4,4'-DDE	2.94	a	386.03	b					0.00034 U,i	0.00016 U,i	0.00011 U	0.00011 U				
4,4'-DDT	2.94	a	386.03	b					0.007 U,i	0.00055 J	0.0042 P	0.001				
Aldrin	0.059	a	7.72	b					0.0047 P	0.001 U,i	0.001 U,i	0.0001 U				
alpha-BHC	0.159	a	20.83	b					0.0015 U,i	0.00014 U	0.00013 U	0.00013 U				
alpha-Chlordane	2.857	a	375	b					0.00075 J	0.00013 U	0.001 U,i	0.00011 U				
beta-BHC	0.56	a	72.92	b					0.0038 P	0.00089 U,i	0.00025 U	0.00025 U				
delta-BHC	0.76	a	101	b					0.0023 U,i	0.00015 U	0.00014 U	0.00014 U				
Dieldrin	0.0625	a	8.2	b					0.0031 U,i	.001 U,i	0.0001 U,i	0.00079 J				
Endosulfan I	480	a	21000	b					0.0022	0.00017 J	0.001 U,i	0.00013 U				
Endosulfan II	480	a	21000	b					0.0028 U,i	0.00028 U,i	0.00076 U,i	0.00014 U				
Endosulfan Sulfate	480	a	21000	b					0.0016 U,i	0.00017 U,i	0.001 U,i	0.00013 U				
Endrin	24	a	1050	b					0.0013 U,i	0.00015 U	0.00089 U,i	0.00014 U				
Endrin Aldehyde	24	a	1050	b					0.0034 U,i	0.00016 U	0.0017 U,i	0.00015 U				
Endrin Ketone	24	a	1050	b					0.0012 U,i	0.00011 U	0.001 U,i	0.0002 U,i				
gamma-BHC	0.77	a	100.96	b					0.0041 U,i	.0011 U,i	0.002 U,i	0.00019 U				
gamma-Chlordane	2.86	a	375	b					0.0015 U,i	0.00022 U	0.0002 U	0.0002 U				
Heptachlor	0.22	a	29.17	b					0.0009 J	0.00029 U,i	0.00018 U	0.00061 J,P				
Heptachlor Epoxide	0.11	a	14.42	b					0.002 U,i	0.00025 U	0.001 U,i	0.00022 U				
Methoxychlor	400	a	17500	b					0.00035 U	0.00027 U	0.00025 U	0.00025 U				
Toxaphene	0.91	a	119.32	b					0.280 U,i	0.014 U,i	0.059 U,i	0.019 U,i				

Notes: a – Criteria based on Ecology's Method B and assuming unrestricted exposure parameters. For PCBs, values are based on carcinogenic screening levels for high risk and persistent category PCB mixtures per personal communication with Peter Kimet, Washington Department of Ecology.

b – Criteria based on Ecology's Method C and assuming industrial exposure parameters. For PCBS, Values are based on carcinogenic screening levels for high risk and persistent category PCB mixtures per personal communication with Peter Kimet, Washington Department of Ecology.

Bold – concentrations exceeding unrestricted criteria.

Bold Italic – concentrations exceeding industrial criteria.

Table E-4. PAH Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.

Analyte	Criteria		BL20	BP20	CS20	DB21
	Unrestricted	Industrial	3"-GW	3"-GW	3"-GW	3"-GW
2-Methylnaphthalene	310	c	4100	c	0.01 U	0.01 U
Acenaphthene	4800	a	210000	b	0.02 U	0.02 U
Acenaphthylene	no criteria	no criteria		0.02 U	0.02 U	0.01 U
Anthracene	24000	a	1050000	b	0.02 U	0.02 U
Benzo(a)anthracene	0.137	a	17.979	b	0.03 J	0.03 J
Benzo(a)pyrene	0.137	a	17.979	b	0.03 J	0.05 J
Benzo(b)fluoranthene	0.137	a	17.979	b	0.02 U	0.05 J
Benzo(g,h,i)perylene	no criteria	no criteria		0.06 J	0.08 J	0.08 J
Benzo(k)fluoranthene	0.137	a	17.979	b	0.02 U	0.04 J
Chrysene	0.137	a	17.979	b	0.03 J	0.04 J
Dibeno(a,h)anthracene	0.137	a	17.979	b	0.04 J	0.05 J
Dibenzofuran	160	c	2000	c	0.01 U	0.01 U
Fluoranthene	3200	a	140000	b	0.07 J	0.06 J
Fluorene	3200	a	140000	b	0.02 U	0.02 U
Indeno(1,2,3-cd)pyrene	0.137	a	17.979	b	0.06 J	0.06 J
Naphthalene	1600	a	70000	b	0.03 J	0.02 U
Phenanthrene	no criteria	no criteria		0.06 J	0.05 J	0.07 J
Pyrene	2400	a	105000	b	0.07 J	0.06 J
CPAH (rl=0)	0.137	a	17.979	b	0.06	0.09
CPAH (rl=1/2)	0.137	a	17.979	b	0.06	0.09

Notes:

a – Criteria based on Ecology's Method B

and assuming unrestricted exposure parameters.

b – Criteria based on Ecology's Method C

and assuming industrial exposure parameters.

c - Criteria based on EPA Region III risk-based screening criteria.

Bold – concentrations exceeding unrestricted criteria.

Bold Italic – concentrations exceeding industrial criteria.

Table E-4. PAH Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.

Analyte	Criteria		DK20 3"-GW	FR02 3"-GW	FR20 3"-GW
	Unrestricted	Industrial			
2-Methylnaphthalene	310	c	4100	c	0.01 U
Acenaphthene	4800	a	210000	b	0.02 U
Acenaphthylene	no criteria		no criteria		0.01 U
Anthracene	24000	a	1050000	b	0.02 U
Benzo(a)anthracene	0.137	a	17.979	b	0.01 U
Benzo(a)pyrene	0.137	a	17.979	b	0.02 U
Benzo(b)fluoranthene	0.137	a	17.979	b	0.02 U
Benzo(g,h,i)perylene	no criteria		no criteria		0.07 J
Benzo(k)fluoranthene	0.137	a	17.979	b	0.02 U
Chrysene	0.137	a	17.979	b	0.02 J
Dibeno(a,h)anthracene	0.137	a	17.979	b	0.04 J
Dibenzofuran	160	c	2000	c	0.01 U
Fluoranthene	3200	a	140000	b	0.01 U
Fluorene	3200	a	140000	b	0.01 U
Indeno(1,2,3-cd)pyrene	0.137	a	17.979	b	0.05 J
Naphthalene	1600	a	70000	b	0.02 U
Phenanthrene	no criteria		no criteria		0.01 U
Pyrene	2400	a	105000	b	0.02 U
CPAH (rl=0)	0.137	a	17.979	b	0.02
CPAH (rl=1/2)	0.137	a	17.979	b	0.03

Notes:

a – Criteria based on Ecology's Method B

and assuming unrestricted exposure parameters.

b – Criteria based on Ecology's Method C

and assuming industrial exposure parameters.

c - Criteria based on EPA Region III risk-based screening criteria.

Bold – concentrations exceeding unrestricted criteria.

Bold Italic – concentrations exceeding industrial criteria.

Table E-4. PAH Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.

Analyte	Criteria		LY21		LY24	
	Unrestricted	Industrial	0-3"	3"-GW	0-3"	3"-GW
2-Methylnaphthalene	310	c	4100	c	4.7	40
Acenaphthene	4800	a	210000	b	0.16 J	5.4
Acenaphthylene	no criteria		no criteria		0.22 J	0.13 U
Anthracene	24000	a	1050000	b	0.37 J	4
Benzo(a)anthracene	0.137	a	17.979	b	3 J,D	25
Benzo(a)pyrene	0.137	a	17.979	b	17 J,D	14 J,D
Benzo(b)fluoranthene	0.137	a	17.979	b	7.5 J,D	6.1 J,D
Benzo(g,h,i)perylene	no criteria		no criteria		12 J,D	4.7 J,D
Benzo(k)fluoranthene	0.137	a	17.979	b	2 U	2 U
Chrysene	0.137	a	17.979	b	16 J,D	41
Dibeno(a,h)anthracene	0.137	a	17.979	b	4.3 J,D	2.8 U
Dibenzofuran	160	c	2000	c	0.51 J	1.1 J
Fluoranthene	3200	a	140000	b	1.3 J	4.3
Fluorene	3200	a	140000	b	0.5 J	6.8
Indeno(1,2,3-cd)pyrene	0.137	a	17.979	b	3.9 U	3.9 U
Naphthalene	1600	a	70000	b	2.3 J	4.7
Phenanthrene	no criteria		no criteria		2.9 J	43
Pyrene	2400	a	105000	b	17 J,D	51 D
CPAH (rl=0)	0.137	a	17.979	b	19.93	17.52
CPAH (rl=1/2)	0.137	a	17.979	b	20.23	18.38

Notes:

a – Criteria based on Ecology's Method B

and assuming unrestricted exposure parameters.

b – Criteria based on Ecology's Method C

and assuming industrial exposure parameters.

c - Criteria based on EPA Region III risk-based screening criteria.

Bold – concentrations exceeding unrestricted criteria.

Bold Italic – concentrations exceeding industrial criteria.

Table E-4. PAH Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.

Analyte	Criteria		LY25		MR20	
	Unrestricted	Industrial	0-3"	3"-GW	0-3"	3"-GW
2-Methylnaphthalene	310	c	4100	c	0.01 U	0.01 U
Acenaphthene	4800	a	210000	b	0.02 U	0.02 U
Acenaphthylene	no criteria		no criteria		0.01 U	0.01 U
Anthracene	24000	a	1050000	b	0.02 J	0.02 U
Benzo(a)anthracene	0.137	a	17.979	b	0.06 J	0.01 U
Benzo(a)pyrene	0.137	a	17.979	b	0.11 J	0.02 U
Benzo(b)fluoranthene	0.137	a	17.979	b	0.11 J	0.02 U
Benzo(g,h,i)perylene	no criteria		no criteria		0.11 J	0.02 U
Benzo(k)fluoranthene	0.137	a	17.979	b	0.11 J	0.02 U
Chrysene	0.137	a	17.979	b	0.06 J	0.01 U
Dibeno(a,h)anthracene	0.137	a	17.979	b	0.07 J	0.03 U
Dibenzofuran	160	c	2000	c	0.01 U	0.01 U
Fluoranthene	3200	a	140000	b	0.1 J	0.01 U
Fluorene	3200	a	140000	b	0.01 U	0.01 U
Indeno(1,2,3-cd)pyrene	0.137	a	17.979	b	0.09 J	0.04 U
Naphthalene	1600	a	70000	b	0.02 U	0.02 U
Phenanthrene	no criteria		no criteria		0.09 J	0.01 U
Pyrene	2400	a	105000	b	0.08 J	0.02 U
CPAH (rl=0)	0.137	a	17.979	b	0.18	0 U
CPAH (rl=1/2)	0.137	a	17.979	b	0.18	0.02 U
						0.06
						0.15

Notes:

a – Criteria based on Ecology's Method B

and assuming unrestricted exposure parameters.

b – Criteria based on Ecology's Method C

and assuming industrial exposure parameters.

c - Criteria based on EPA Region III risk-based screening criteria.

Bold – concentrations exceeding unrestricted criteria.

Bold Italic – concentrations exceeding industrial criteria.

Table E-4. PAH Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.

Analyte	Criteria		PC20	PS20	PW	RB01		
	Unrestricted	Industrial	3"-GW	3"-GW	3"-GW	3"-GW		
2-Methylnaphthalene	310	c	4100	c	0.01 U	0.01 U	0.01 U	0.9
Acenaphthene	4800	a	210000	b	0.03 J	0.02 U	0.02 U	1.1
Acenaphthylene	no criteria		no criteria		0.02 U	0.01 U	0.01 U	0.01 U
Anthracene	24000	a	1050000	b	0.02 J	0.02 U	0.02 U	0.57
Benzo(a)anthracene	0.137	a	17.979	b	0.03 J	0.01 U	0.01 U	0.32 J
Benzo(a)pyrene	0.137	a	17.979	b	0.02 J	0.02 U	0.02 U	0.19 J
Benzo(b)fluoranthene	0.137	a	17.979	b	0.03 J	0.02 U	0.02 U	0.19 J
Benzo(g,h,i)perylene	no criteria		no criteria		0.02 U	0.02 U	0.04 J	0.22 J
Benzo(k)fluoranthene	0.137	a	17.979	b	0.03 J	0.02 U	0.02 U	0.12 J
Chrysene	0.137	a	17.979	b	0.04 J	0.01 U	0.01 U	0.45
Dibeno(a,h)anthracene	0.137	a	17.979	b	0.03 U	0.03 U	0.03 U	0.11 J
Dibenzofuran	160	c	2000	c	0.02 U	0.01 U	0.01 U	0.87
Fluoranthene	3200	a	140000	b	0.13 J	0.01 U	0.01 U	1.3
Fluorene	3200	a	140000	b	0.03 J	0.01 U	0.01 U	1.2
Indeno(1,2,3-cd)pyrene	0.137	a	17.979	b	0.04 U	0.04 U	0.04 U	0.17 J
Naphthalene	1600	a	70000	b	0.02 J	0.02 U	0.02 U	2.1
Phenanthrene	no criteria		no criteria		0.1 J	0.01 U	0.01 U	3.2
Pyrene	2400	a	105000	b	0.11 J	0.02 U	0.02 U	1.3
CPAH (rl=0)	0.137	a	17.979	b	0.03	0 U	0 U	0.32
CPAH (rl=1/2)	0.137	a	17.979	b	0.04	0.02 U	0.02 U	0.32

Notes:

a – Criteria based on Ecology's Method B

and assuming unrestricted exposure parameters.

b – Criteria based on Ecology's Method C

and assuming industrial exposure parameters.

c - Criteria based on EPA Region III risk-based screening criteria.

Bold – concentrations exceeding unrestricted criteria.

Bold Italic – concentrations exceeding industrial criteria.

Table E-4. PAH Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.

Analyte	Criteria		RB20 3"-GW	RB21 3"-GW	RS20	
	Unrestricted	Industrial			0-3"	3"-GW
2-Methylnaphthalene	310	c	4100	c	0.01 U	0.01 U
Acenaphthene	4800	a	210000	b	0.02 J	0.02 U
Acenaphthylene	no criteria		no criteria		0.01 U	0.02 U
Anthracene	24000	a	1050000	b	0.06 J	0.02 U
Benzo(a)anthracene	0.137	a	17.979	b	0.12 J	0.02 U
Benzo(a)pyrene	0.137	a	17.979	b	0.16 J	0.28 J,D
Benzo(b)fluoranthene	0.137	a	17.979	b	0.11 J	0.02 U
Benzo(g,h,i)perylene	no criteria		no criteria		0.16 J	0.03 U
Benzo(k)fluoranthene	0.137	a	17.979	b	0.14 J	0.17 J,D
Chrysene	0.137	a	17.979	b	0.16 J	0.6
Dibeno(a,h)anthracene	0.137	a	17.979	b	0.04 J	0.03 U
Dibenzofuran	160	c	2000	c	0.01 U	0.02 U
Fluoranthene	3200	a	140000	b	0.33 J	0.01 U
Fluorene	3200	a	140000	b	0.02 J	0.02 U
Indeno(1,2,3-cd)pyrene	0.137	a	17.979	b	0.15 J	0.12 J,D
Naphthalene	1600	a	70000	b	0.02 U	0.02 U
Phenanthrene	no criteria		no criteria		0.22 J	0.01 U
Pyrene	2400	a	105000	b	0.29 J	0.35
CPAH (rl=0)	0.137	a	17.979	b	0.23	0.39
CPAH (rl=1/2)	0.137	a	17.979	b	0.23	0.40

Notes:

a – Criteria based on Ecology's Method B

and assuming unrestricted exposure parameters.

b – Criteria based on Ecology's Method C

and assuming industrial exposure parameters.

c - Criteria based on EPA Region III risk-based screening criteria.

Bold – concentrations exceeding unrestricted criteria.

Bold Italic – concentrations exceeding industrial criteria.

Table E-4. PAH Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.

Analyte	Criteria		RS21		SSL20	SSL21		
	Unrestricted	Industrial	0-3"	3"-GW	3"-GW	3"-GW		
2-Methylnaphthalene	310	c	4100	c	0.02 J	0.01 U	0.01 U	0.02 J
Acenaphthene	4800	a	210000	b	0.02 J	0.02 U	0.02 U	0.02 U
Acenaphthylene	no criteria		no criteria		0.01 U	0.01 U	0.02 U	0.02 U
Anthracene	24000	a	1050000	b	0.05 J	0.02 U	0.02 U	0.02 U
Benzo(a)anthracene	0.137	a	17.979	b	0.16 J	0.01 U	0.01 U	0.03 J
Benzo(a)pyrene	0.137	a	17.979	b	0.14 J	0.02 U	0.02 U	0.02 J
Benzo(b)fluoranthene	0.137	a	17.979	b	0.25 J	0.02 U	0.02 U	0.03 J
Benzo(g,h,i)perylene	no criteria		no criteria		0.11 J	0.02 U	0.02 U	0.02 J
Benzo(k)fluoranthene	0.137	a	17.979	b	0.18 J	0.02 U	0.02 U	0.04 J
Chrysene	0.137	a	17.979	b	0.3 J	0.01 U	0.01 U	0.05 J
Dibeno(a,h)anthracene	0.137	a	17.979	b	0.04 J	0.03 U	0.03 U	0.03 U
Dibenzofuran	160	c	2000	c	0.03 J	0.01 U	0.01 U	0.02 J
Fluoranthene	3200	a	140000	b	0.39	0.01 U	0.02 J	0.12 J
Fluorene	3200	a	140000	b	0.02 J	0.02 U	0.02 U	0.02 U
Indeno(1,2,3-cd)pyrene	0.137	a	17.979	b	0.12 J	0.04 U	0.04 U	0.04 U
Naphthalene	1600	a	70000	b	0.04 J	0.02 U	0.02 U	0.07 J
Phenanthrene	no criteria		no criteria		0.22 J	0.01 U	0.02 J	0.11 J
Pyrene	2400	a	105000	b	0.33	0.02 U	0.02 U	0.1 J
CPAH (rl=0)	0.137	a	17.979	b	0.23	0 U	0 U	0.03
CPAH (rl=1/2)	0.137	a	17.979	b	0.23	0.02 U	0.02 U	0.04

Notes:

a – Criteria based on Ecology's Method B

and assuming unrestricted exposure parameters.

b – Criteria based on Ecology's Method C

and assuming industrial exposure parameters.

c - Criteria based on EPA Region III risk-based screening criteria.

Bold – concentrations exceeding unrestricted criteria.

Bold Italic – concentrations exceeding industrial criteria.

Table E-4. PAH Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.

Analyte	Criteria		SL22: 0 - 3"		SR03	SR20
	Unrestricted	Industrial	0-3"	3"-GW		
2-Methylnaphthalene	310	c	4100	c	0.01 U	0.03 J
Acenaphthene	4800	a	210000	b	0.02 U	0.09 J
Acenaphthylene	no criteria		no criteria		0.01 U	0.02 U
Anthracene	24000	a	1050000	b	0.02 U	0.1 J
Benzo(a)anthracene	0.137	a	17.979	b	0.01 U	0.18 J
Benzo(a)pyrene	0.137	a	17.979	b	0.02 U	0.15 J
Benzo(b)fluoranthene	0.137	a	17.979	b	0.02 U	0.3 J
Benzo(g,h,i)perylene	no criteria		no criteria		0.02 U	0.09 J
Benzo(k)fluoranthene	0.137	a	17.979	b	0.02 U	0.22 J
Chrysene	0.137	a	17.979	b	0.01 U	0.49
Dibeno(a,h)anthracene	0.137	a	17.979	b	0.03 U	0.04 U
Dibenzofuran	160	c	2000	c	0.01 U	0.08 J
Fluoranthene	3200	a	140000	b	0.01 U	0.01 U
Fluorene	3200	a	140000	b	0.01 U	0.08 J
Indeno(1,2,3-cd)pyrene	0.137	a	17.979	b	0.04 U	0.1 J
Naphthalene	1600	a	70000	b	0.02 U	0.05 J
Phenanthrene	no criteria		no criteria		0.01 U	0.37
Pyrene	2400	a	105000	b	0.02 U	0.41
CPAH (rl=0)	0.137	a	17.979	b	0 U	0.23
CPAH (rl=1/2)	0.137	a	17.979	b	0.02 U	0.24

Notes:

a – Criteria based on Ecology's Method B

and assuming unrestricted exposure parameters.

b – Criteria based on Ecology's Method C

and assuming industrial exposure parameters.

c - Criteria based on EPA Region III risk-based screening criteria.

Bold – concentrations exceeding unrestricted criteria.

Bold Italic – concentrations exceeding industrial criteria.

Table E-4. PAH Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.

Analyte	Criteria		SR21 3"-GW	SR22 3"-GW	SR23 3"-GW	SR24 3"-GW
	Unrestricted	Industrial				
2-Methylnaphthalene	310	c	4100	c	0.02 U	0.15 J
Acenaphthene	4800	a	210000	b	0.02 U	0.22 J
Acenaphthylene	no criteria		no criteria		0.02 U	0.02 U
Anthracene	24000	a	1050000	b	0.02 U	0.08 J
Benzo(a)anthracene	0.137	a	17.979	b	0.02 U	0.07 J
Benzo(a)pyrene	0.137	a	17.979	b	0.03 U	0.25 J
Benzo(b)fluoranthene	0.137	a	17.979	b	0.02 U	0.42
Benzo(g,h,i)perylene	no criteria		no criteria		0.03 U	0.07 J
Benzo(k)fluoranthene	0.137	a	17.979	b	0.03 U	0.26 J
Chrysene	0.137	a	17.979	b	0.02 U	0.66
Dibeno(a,h)anthracene	0.137	a	17.979	b	0.04 U	0.03 U
Dibenzofuran	160	c	2000	c	0.02 U	0.97
Fluoranthene	3200	a	140000	b	0.02 U	2.9
Fluorene	3200	a	140000	b	0.02 U	1.9
Indeno(1,2,3-cd)pyrene	0.137	a	17.979	b	0.05 U	0.09 J
Naphthalene	1600	a	70000	b	0.02 U	0.42
Phenanthrene	no criteria		no criteria		0.02 J	4.1
Pyrene	2400	a	105000	b	0.02 U	2.7
CPAH (rl=0)	0.137	a	17.979	b	0 U	0.39
CPAH (rl=1/2)	0.137	a	17.979	b	0.03 U	0.40

Notes:

a – Criteria based on Ecology's Method B

and assuming unrestricted exposure parameters.

b – Criteria based on Ecology's Method C

and assuming industrial exposure parameters.

c - Criteria based on EPA Region III risk-based screening criteria.

Bold – concentrations exceeding unrestricted criteria.

Bold Italic – concentrations exceeding industrial criteria.

Table E-4. PAH Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.

Analyte	Criteria		WM20		WM21	
	Unrestricted	Industrial	0-3"	3"-GW	0-3"	3"-GW
2-Methylnaphthalene	310	c	4100	c	2.1	0.58
Acenaphthene	4800	a	210000	b	2.6	0.73
Acenaphthylene	no criteria		no criteria		0.26 J	0.05 J
Anthracene	24000	a	1050000	b	2.9	0.9
Benzo(a)anthracene	0.137	a	17.979	b	7.9 D	1.7
Benzo(a)pyrene	0.137	a	17.979	b	6.9 D	1.5
Benzo(b)fluoranthene	0.137	a	17.979	b	7.9 D	1.6
Benzo(g,h,i)perylene	no criteria		no criteria		4.2 D	0.94
Benzo(k)fluoranthene	0.137	a	17.979	b	6.4 D	1.5
Chrysene	0.137	a	17.979	b	9.1 D	1.9
Dibeno(a,h)anthracene	0.137	a	17.979	b	1.1 J,D	0.32 J
Dibenzofuran	160	c	2000	c	3	0.82
Fluoranthene	3200	a	140000	b	16 D	3.1
Fluorene	3200	a	140000	b	3.9	1.1
Indeno(1,2,3-cd)pyrene	0.137	a	17.979	b	4.8 D	1.2
Naphthalene	1600	a	70000	b	4.2	1.4
Phenanthrene	no criteria		no criteria		22 D	4.7
Pyrene	2400	a	105000	b	19 D	4.3
CPAH (rl=0)	0.137	a	17.979	b	10.13	2.25
CPAH (rl=1/2)	0.137	a	17.979	b	10.13	2.25

Notes:

a – Criteria based on Ecology's Method B

and assuming unrestricted exposure parameters.

b – Criteria based on Ecology's Method C

and assuming industrial exposure parameters.

c - Criteria based on EPA Region III risk-based screening criteria.

Bold – concentrations exceeding unrestricted criteria.

Bold Italic – concentrations exceeding industrial criteria.

Table E-5. Petroleum Hydrocarbon Concentrations (ppm) in Soils from the 2003 Remedial Investigation.

Analyte	Criteria		DK20		LY21		MS20		RB01		RB20		RB22		WM20		WM21		
	Unrestricted	Industrial	0-3"	3"-GW	0-3"	3"-GW	0-3"	3"-GW	0-3"	3"-GW	0-3"	3"-GW	0-3"	3"-GW	0-3"	3"-GW	0-3"	3"-GW	
Gasoline Range Organics (GRO)	100	a	100	b	2.5 U	2.3 U	3.6 U	39 H	2.3 U	5 J	5.4 J	2.4 U	2.4 U	2.3 U	6.6 J	9.8 J	6.3 J	3.1 U	6.7 J
Diesel Range Organics (DRO)	2000	a	2000	b	79 J,Y	14 J	<i>J,D,Y</i>	9400 D,Y	150 J,H	110 J,Y	14 J	22 J	580 Y	110 J	19 J	7.5 U	580 H	710 H	7.4 U
Residual Range Organics (RRO)	2000	a	2000	b	340 J,O	190 J,O	<i>D,O</i>	11000 D,O	1300 O	320 J,O	110 J	170 J	250 J	160 J	45 J	6.1 J	2800 O	2600 O	5.2 J
Benzene	18.18	a	2386	b				0.02 U											
Ethylbenzene	8000	a	350000	b				0.5 U											
Toluene	16000	a	700000	b				0.5 U											
m,p-Xylene , VPH	160000		7000000					0.5 U											
o-Xylene , VPH	160000		7000000					0.5 U											
Methyl t-butyl ether , VPH								0.11 U											
Aliphatic C10-C12 , EPH								91 U	29										
Aliphatic C10-C12 , VPH									47										
Aliphatic C12-C16 , EPH								220	250										
Aliphatic C16-C21 , EPH								2500	370										
Aliphatic C21-C34 , EPH								12000	1600										
Aliphatic C5-C6 , VPH									5 U										
Aliphatic C6-C8 , VPH									5 U										
Aliphatic C8-C10 , EPH								180 U	57 U										
Aliphatic C8-C10 , VPH									5 U										
Aromatic C10-C12 , EPH								91 U	35										
Aromatic C10-C12 , VPH									110										
Aromatic C12-C13 , VPH									210										
Aromatic C12-C16 , EPH								91 U	370										
Aromatic C16-C21 , EPH									640	1600									
Aromatic C21-C34 , EPH									8200	4500									
Aromatic C8-C10 , EPH								180 U	57 U										
Aromatic C8-C10 , VPH									15										
Total Aliphatic , EPH								15000	2200										
Total Aliphatic , VPH									47										
Total Aromatic , EPH								8800	6500										

Notes:

a – Criteria based on Ecology's Method B and assuming unrestricted exposure parameters.

b – Criteria based on Ecology's Method C and assuming industrial exposure parameters.

Bold – concentrations exceeding unrestricted criteria.***Bold Italic*** – concentrations exceeding industrial criteria.

**Table E-6. Semivolatile Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.**

Analyte	Criteria		BL20	BP20	CS20	DB21	DK20	FR02	FR20
	Unrestricted	Industrial	3'-GW						
1,2,4-Trichlorobenzene	800.00	35000.00	0.01 U						
1,2-Dichlorobenzene	7200.00	315000.00	0.02 U						
1,3-Dichlorobenzene	2346.43	30660.00	0.02 U						
1,4-Dichlorobenzene	41.67	5468.75	0.03 J	0.02 U					
2,4,5-Trichlorophenol	8000.00	350000.00	0.02 U						
2,4,6-Trichlorophenol	90.91	11931.82	0.02 U						
2,4-Dichlorophenol	240.00	10500.00	0.02 U						
2,4-Dimethylphenol	1600.00	70000.00	0.02 U						
2,4-Dinitrophenol	160.00	7000.00	0.13 U	0.13 U	0.14 U	0.13 U	0.12 U	0.13 U	0.14 U
2,4-Dinitrotoluene	160.00	7000.00	0.02 U						
2,6-Dinitrotoluene	80.00	3500.00	0.02 U						
2-Chloronaphthalene	6400.00	280000.00	0.01 U						
2-Chlorophenol	400.00	17500.00	0.01 U						
2-Methylphenol	4000.00	175000.00	0.02 U						
2-Nitroaniline	no criteria	no criteria	0.02 U						
2-Nitrophenol			0.02 U						
3,3'-Dichlorobenzidine	2.22	291.67	0.03 U						
3-Nitroaniline	23.46	143.08	0.2 U	0.2 U	0.21 U	0.2 U	0.19 U	0.19 U	0.22 U
4,6-Dinitro-2-methylphenol	7.82	102.20	0.17 U	0.16 U	0.17 U	0.16 U	0.16 U	0.16 U	0.18 U
4-Bromophenyl Phenyl Ether	no criteria	no criteria	0.01 U	0.01 U	0.02 U	0.01 U	0.01 U	0.01 U	0.02 U
4-Chloro-3-methylphenol			0.02 U						
4-Chloroaniline	320.00	14000.00	0.02 U						
4-Chlorophenyl Phenyl Ether	no criteria	no criteria	0.02 U						
4-Methylphenol			0.02 U	0.02 U	0.03 J	0.02 U	0.02 U	0.02 U	0.02 U
4-Nitroaniline	no criteria	no criteria	0.21 U	0.2 U	0.21 U	0.2 U	0.2 U	0.2 U	0.23 U

**Table E-6. Semivolatile Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.**

Analyte	Criteria		BL20	BP20	CS20	DB21	DK20	FR02	FR20
	Unrestricted	Industrial	3'-GW						
4-Nitrophenol	630.00	16000.00	0.17 U	0.17 U	0.18 U	0.16 U	0.16 U	0.16 U	0.19 U
Benzyl Alcohol	24000.00	1050000.00	0.02 U	0.07 J					
Bis(2-chloroethyl) Ether	0.91	119.32	0.01 U	0.02 U					
Bis(2-chloroisopropyl) Ether	3200.00	140000.00	0.02 U						
Bis(2-ethylhexyl) Phthalate	71.43	9375.00	0.21 J	0.13 J	0.02 U	0.05 J	0.02 U	0.06 J	0.05 J
Butyl Benzyl Phthalate	16000.00	700000.00	0.02 U	0.04 J	0.02 U				
Carbazole	50.00	6562.50	0.01 U	0.01 U	0.02 J	0.03 J	0.01 U	0.01 U	0.01 U
Diethyl Phthalate	64000.00	2800000.00	0.02 U						
Dimethyl Phthalate	80000.00	3500000.00	0.02 U	0.02 U	0.02 U	0.12 J	0.02 U	0.02 J	0.06 J
Di-n-butyl Phthalate	8000.00	350000.00	0.01 U	0.01 U	0.02 U	0.02 J	0.01 U	0.01 U	0.03 J
Di-n-octyl Phthalate	1600.00	70000.00	0.03 U						
Hexachlorobenzene	0.63	82.03	0.02 U						
Hexachlorobutadiene	12.82	700.00	0.02 U						
Hexachlorocyclopentadiene	480.00	21000.00	0.02 U	0.01 U	0.02 U	0.01 U	0.01 U	0.01 U	0.02 U
Hexachloroethane	71.43	3500.00	0.03 U	0.02 U	0.03 U	0.02 U	0.02 U	0.02 U	0.03 U
Isophorone	1052.63	138157.89	0.02 U						
Nitrobenzene	40.00	1750.00	0.03 U						
N-Nitrosodi-n-propylamine	0.14	18.75	0.02 U						
N-Nitrosodiphenylamine	204.08	26785.71	0.02 U						
Pentachlorophenol	8.33	1093.75	0.15 U	0.14 U	0.15 U	0.14 U	0.14 U	0.14 U	0.16 U
Phenol	48000.00	2100000.00	0.02 U	0.03 U					

**Table E-6. Semivolatile Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.**

Analyte	Criteria		MR20	MS20	PC20	PS20	PW20	RB01	RB20	RB21	RS
	Unrestricted	Industrial	0-3"	3'-GW	0-3"						
1,2,4-Trichlorobenzene	800.00	35000.00	0.01 U	0.02 U	0.01 U	0.02 U					
1,2-Dichlorobenzene	7200.00	315000.00	0.02 U	0.03 U	0.02 U	0.22 J	0.03 U				
1,3-Dichlorobenzene	2346.43	30660.00	0.02 U	0.03 U	0.02 U	0.03 U					
1,4-Dichlorobenzene	41.67	5468.75	0.02 U	0.03 U	0.02 J	0.03 U					
2,4,5-Trichlorophenol	8000.00	350000.00	0.02 U	0.03 U							
2,4,6-Trichlorophenol	90.91	11931.82	0.02 U								
2,4-Dichlorophenol	240.00	10500.00	0.02 U	0.05 J	0.02 U	0.02 U	0.03 U				
2,4-Dimethylphenol	1600.00	70000.00	0.02 U								
2,4-Dinitrophenol	160.00	7000.00	0.13 U	0.16 U	0.13 U	0.12 U	0.12 U	0.13 U	0.13 U	0.13 U	0.18 U
2,4-Dinitrotoluene	160.00	7000.00	0.02 U								
2,6-Dinitrotoluene	80.00	3500.00	0.02 U	0.03 U							
2-Chloronaphthalene	6400.00	280000.00	0.01 U	0.02 U							
2-Chlorophenol	400.00	17500.00	0.01 U	0.02 U							
2-Methylphenol	4000.00	175000.00	0.02 U	0.03 U							
2-Nitroaniline	no criteria	no criteria	0.02 U	0.03 U							
2-Nitrophenol			0.02 U								
3,3'-Dichlorobenzidine	156.43	2044.00	0.03 U	0.04 U	0.03 U	0.04 U					
3-Nitroaniline	2.22	291.67	0.21 U	0.25 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.19 U	0.28 U
4,6-Dinitro-2-methylphenol	23.46	143.08	0.17 U	0.2 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.23 U
4-Bromophenyl Phenyl Ether	no criteria	no criteria	0.01 U	0.02 U	0.01 U	0.02 U					
4-Chloro-3-methylphenol			0.02 U	0.03 U							
4-Chloroaniline	320.00	14000.00	0.02 U								
4-Chlorophenyl Phenyl Ether	no criteria	no criteria	0.02 U	0.03 U							
4-Methylphenol			0.02 U	0.03 U							
4-Nitroaniline	no criteria	no criteria	0.21 U	0.25 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.2 U	0.28 U

**Table E-6. Semivolatile Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.**

Analyte	Criteria		MR20	MS20	PC20	PS20	PW20	RB01	RB20	RB21	RS
	Unrestricted	Industrial	0-3"	3'-GW	3'-GW	3'-GW	3'-GW	3'-GW	3'-GW	3'-GW	0-3"
4-Nitrophenol	630.00	16000.00	0.17 U	0.21 U	0.17 U	0.16 U	0.16 U	0.17 U	0.16 U	0.16 U	0.23 U
Benzyl Alcohol	24000.00	1050000.00	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.06 J	0.02 U	0.02 U	0.03 U
Bis(2-chloroethyl) Ether	0.91	119.32	0.01 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U
Bis(2-chloroisopropyl) Ether	3200.00	140000.00	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Bis(2-ethylhexyl) Phthalate	71.43	9375.00	0.19 J	1800 D	0.1 J	0.11 J	0.08 J	0.2 J	0.17 J	0.24 J	0.1 J
Butyl Benzyl Phthalate	16000.00	700000.00	0.02 U	0.26 J	0.02 U	0.03 U					
Carbazole	50.00	6562.50	0.01 U	0.02 U	0.01 U	0.01 U	0.01 U	0.15 J	0.02 J	0.2 J	0.02 U
Diethyl Phthalate	64000.00	2800000.00	0.02 U	0.06 J	0.02 U						
Dimethyl Phthalate	80000.00	3500000.00	0.02 U	0.02 U	0.26 J	0.02 U	0.5				
Di-n-butyl Phthalate	8000.00	350000.00	0.01 U	0.52	0.03 J	0.01 U	0.04 J				
Di-n-octyl Phthalate	1600.00	70000.00	0.03 U	0.96 J,D	0.03 U	0.03 U	0.03 U	0.25 J	0.03 U	0.05 U	0.04 U
Hexachlorobenzene	0.63	82.03	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Hexachlorobutadiene	12.82	700.00	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	1.6 U
Hexachlorocyclopentadiene	480.00	21000.00	0.02 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U
Hexachloroethane	71.43	3500.00	0.03 U	0.03 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.03 U
Isophorone	1052.63	138157.89	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Nitrobenzene	40.00	1750.00	0.03 U	0.04 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.04 U
N-Nitrosodi-n-propylamine	0.14	18.75	0.02 U	0.03 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.03 U
N-Nitrosodiphenylamine	204.08	26785.71	0.02 U	0.03 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.03 U
Pentachlorophenol	8.33	1093.75	0.15 U	0.18 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.2 U
Phenol	48000.00	2100000.00	0.02 U	0.03 U	0.02 U	0.02 U	0.02 U	0.05 J	0.02 U	0.02 U	0.03 U

**Table E-6. Semivolatile Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.**

Analyte	Criteria		20	RS21		SR03	SR20	SR21	SR22	SR23
	Unrestricted	Industrial	3'-GW	0-3"	3'-GW	0-3"	3'-GW	3'-GW	3'-GW	3'-GW
1,2,4-Trichlorobenzene	800.00	35000.00	0.01 U	0.02 U	0.01 U	0.01 U				
1,2-Dichlorobenzene	7200.00	315000.00	0.02 U							
1,3-Dichlorobenzene	2346.43	30660.00	0.02 U	0.03 U	0.02 U	0.02 U				
1,4-Dichlorobenzene	41.67	5468.75	0.02 U							
2,4,5-Trichlorophenol	8000.00	350000.00	0.02 U							
2,4,6-Trichlorophenol	90.91	11931.82	0.02 U							
2,4-Dichlorophenol	240.00	10500.00	0.02 U							
2,4-Dimethylphenol	1600.00	70000.00	0.02 U							
2,4-Dinitrophenol	160.00	7000.00	0.14 U	0.13 U	0.13 U	0.15 U	0.14 U	0.16 U	0.14 U	0.14 U
2,4-Dinitrotoluene	160.00	7000.00	0.02 U							
2,6-Dinitrotoluene	80.00	3500.00	0.02 U							
2-Chloronaphthalene	6400.00	280000.00	0.01 U							
2-Chlorophenol	400.00	17500.00	0.01 U							
2-Methylphenol	4000.00	175000.00	0.02 U							
2-Nitroaniline	no criteria	no criteria	0.02 U							
2-Nitrophenol			0.02 U							
3,3'-Dichlorobenzidine	156.43	2044.00	0.03 U	0.03 U	0.03 U	0.04 U	0.03 U	0.04 U	0.03 U	0.03 U
3-Nitroaniline	2.22	291.67	0.22 U	0.2 U	0.2 U	0.23 U	0.21 U	0.24 U	0.21 U	0.21 U
4,6-Dinitro-2-methylphenol	23.46	143.08	0.18 U	0.16 U	0.16 U	0.19 U	0.17 U	0.2 U	0.17 U	0.17 U
4-Bromophenyl Phenyl Ether	no criteria	no criteria	0.02 U	0.01 U	0.01 U	0.02 U				
4-Chloro-3-methylphenol			0.02 U							
4-Chloroaniline	7.82	102.20	0.02 U							
4-Chlorophenyl Phenyl Ether	no criteria	no criteria	0.02 U							
4-Methylphenol			0.02 U							
4-Nitroaniline	400.00	17500.00	0.22 U	0.2 U	0.2 U	0.23 U	0.21 U	0.24 U	0.21 U	0.21 U
	no criteria	no criteria	0.22 U	0.2 U	0.2 U	0.23 U	0.21 U	0.24 U	0.21 U	0.21 U

**Table E-6. Semivolatile Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.**

Analyte	Criteria		20	RS21		SR03	SR20	SR21	SR22	SR23
	Unrestricted	Industrial	3'-GW	0-3"	3'-GW	0-3"	3'-GW	3'-GW	3'-GW	3'-GW
4-Nitrophenol	630.00	16000.00	0.18 U	0.16 U	0.17 U	0.19 U	0.18 U	0.2 U	0.18 U	0.18 U
Benzyl Alcohol	24000.00	1050000.00	0.02 U							
Bis(2-chloroethyl) Ether	0.91	119.32	0.02 U	0.01 U	0.01 U	0.02 U	0.01 U	0.02 U	0.01 U	0.01 U
Bis(2-chloroisopropyl) Ether	3200.00	140000.00	0.02 U							
Bis(2-ethylhexyl) Phthalate	71.43	9375.00	0.02 U	0.04 J	0.05 J	0.15 J	0.51	0.04 J	0.15 J	0.1 J
Butyl Benzyl Phthalate	16000.00	700000.00	0.02 U							
Carbazole	50.00	6562.50	0.01 U	0.04 J	0.01 U	0.07 J	0.03 J	0.02 U	0.08 J	0.12 J
Diethyl Phthalate	64000.00	2800000.00	0.02 U							
Dimethyl Phthalate	80000.00	3500000.00	0.02 U	0.03 J	0.02 U	0.11 J	0.5	0.02 U	0.02 U	0.02 U
Di-n-butyl Phthalate	8000.00	350000.00	0.02 U	0.01 U	0.01 U	0.02 J	0.02 J	0.02 U	0.02 J	0.02 U
Di-n-octyl Phthalate	1600.00	70000.00	0.03 U							
Hexachlorobenzene	0.63	82.03	1.3 U	0.23 U	1.1 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Hexachlorobutadiene	12.82	700.00	1.3 U	1.1 U	1.1 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Hexachlorocyclopentadiene	480.00	21000.00	0.02 U	0.01 U	0.01 U	0.02 U				
Hexachloroethane	71.43	3500.00	0.03 U	0.02 U	0.02 U	0.03 U				
Isophorone	1052.63	138157.89	0.02 U							
Nitrobenzene	40.00	1750.00	0.03 U	0.04 U	0.03 U	0.03 U				
N-Nitrosodi-n-propylamine	0.14	18.75	0.02 U	0.02 U	0.02 U	0.03 U	0.02 U	0.03 U	0.02 U	0.02 U
N-Nitrosodiphenylamine	204.08	26785.71	0.02 U	0.03 U	0.02 U	0.02 U				
Pentachlorophenol	8.33	1093.75	0.16 U	0.14 U	0.14 U	0.16 U	0.4 J	0.17 U	0.15 U	0.15 U
Phenol	48000.00	2100000.00	0.02 U	0.02 U	0.02 U	0.03 U	0.02 U	0.03 U	0.02 U	0.06 J

**Table E-6. Semivolatile Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.**

Analyte	Criteria		SR24	WM20	WM21
	Unrestricted	Industrial	3'-GW	3'-GW	3'-GW
1,2,4-Trichlorobenzene	800.00	35000.00	0.01 U	0.02 U	0.01 U
1,2-Dichlorobenzene	7200.00	315000.00	0.02 U	0.03 U	0.02 U
1,3-Dichlorobenzene	2346.43	30660.00	0.02 U	0.03 U	0.02 U
1,4-Dichlorobenzene	41.67	5468.75	0.02 U	0.03 U	0.02 U
2,4,5-Trichlorophenol	8000.00	350000.00	0.02 U	0.03 U	0.02 U
2,4,6-Trichlorophenol	90.91	11931.82	0.02 U	0.02 U	0.02 U
2,4-Dichlorophenol	240.00	10500.00	0.02 U	0.03 U	0.02 U
2,4-Dimethylphenol	1600.00	70000.00	0.02 U	0.02 U	0.02 U
2,4-Dinitrophenol	160.00	7000.00	0.13 U	0.17 U	0.12 U
2,4-Dinitrotoluene	160.00	7000.00	0.02 U	0.02 U	0.02 U
2,6-Dinitrotoluene	80.00	3500.00	0.02 U	0.02 U	0.02 U
2-Chloronaphthalene	6400.00	280000.00	0.01 U	0.02 U	0.01 U
2-Chlorophenol	400.00	17500.00	0.01 U	0.02 U	0.01 U
2-Methylphenol	4000.00	175000.00	0.02 U	0.03 U	0.02 U
2-Nitroaniline	no criteria	no criteria	0.02 U	0.03 U	0.02 U
2-Nitrophenol			0.02 U	0.02 U	0.02 U
3,3'-Dichlorobenzidine	2.22	291.67	0.03 U	0.04 U	0.03 U
3-Nitroaniline	23.46	143.08	0.21 U	0.26 U	0.19 U
4,6-Dinitro-2-methylphenol	7.82	102.20	0.17 U	0.22 U	0.16 U
4-Bromophenyl Phenyl Ether	no criteria	no criteria	0.02 U	0.02 U	0.01 U
4-Chloro-3-methylphenol			0.02 U	0.03 U	0.02 U
4-Chloroaniline	320.00	14000.00	0.02 U	0.02 U	0.02 U
4-Chlorophenyl Phenyl Ether	no criteria	no criteria	0.02 U	0.02 U	0.02 U
4-Methylphenol			0.02 U	0.08 J	0.02 U
4-Nitroaniline	no criteria	no criteria	0.21 U	0.27 U	0.2 U

**Table E-6. Semivolatile Chemical Concentrations (ppm)
in Soils from the 2003 Remedial Investigation.**

Analyte	Criteria		SR24	WM20	WM21
	Unrestricted	Industrial	3'-GW	3'-GW	3'-GW
4-Nitrophenol	630.00	16000.00	0.17 U	0.22 U	0.16 U
Benzyl Alcohol	24000.00	1050000.00	0.02 U	0.03 U	0.02 U
Bis(2-chloroethyl) Ether	0.91	119.32	0.01 U	0.02 U	0.01 U
Bis(2-chloroisopropyl) Ether	3200.00	140000.00	0.02 U	0.02 U	0.02 U
Bis(2-ethylhexyl) Phthalate	71.43	9375.00	0.02 U	0.84	0.2 J
Butyl Benzyl Phthalate	16000.00	700000.00	0.02 U	0.03 U	0.02 U
Carbazole	50.00	6562.50	0.01 U	0.82	0.01 U
Diethyl Phthalate	64000.00	2800000.00	0.02 U	0.02 U	0.02 U
Dimethyl Phthalate	80000.00	3500000.00	0.02 U	0.6	0.02 U
Di-n-butyl Phthalate	8000.00	350000.00	0.02 U	1.5	0.01 U
Di-n-octyl Phthalate	1600.00	70000.00	0.03 U	0.04 U	0.03 U
Hexachlorobenzene	0.63	82.03	0.02 U	0.02 U	0.02 U
Hexachlorobutadiene	12.82	700.00	0.02 U	0.02 U	0.02 U
Hexachlorocyclopentadiene	480.00	21000.00	0.02 U	0.02 U	0.01 U
Hexachloroethane	71.43	3500.00	0.03 U	0.03 U	0.02 U
Isophorone	1052.63	138157.89	0.02 U	0.02 U	0.02 U
Nitrobenzene	40.00	1750.00	0.03 U	0.04 U	0.03 U
N-Nitrosodi-n-propylamine	0.14	18.75	0.02 U	0.03 U	0.02 U
N-Nitrosodiphenylamine	204.08	26785.71	0.02 U	0.03 U	0.02 U
Pentachlorophenol	8.33	1093.75	0.15 U	0.19 U	0.14 U
Phenol	48000.00	2100000.00	0.02 U	0.28 J	0.02 U

Table E-7. Conventional Parameters in Soils
from the 2003 Remedial Investigation.

Sample Location	Begin Depth	End Depth	P ² (ppm)	pH	Total C (%)	OM (%)	Total N (%)	Total N _{w/BDL} (%)	NH4-N (ppm)	NO3-N (ppm)
ECO20	0 cm	20 cm	23	5.50	1.625	3.1	0.08689	0.08689	2	13
ECO21	0 cm	20 cm	70	6.20	2.765	5.1	0.1690	0.169	2	1
ECO22	0 cm	20 cm	11	5.90	2.326	4.3	0.1282	0.1282	2	12
ECO23	0 cm	15 cm	10	5.80	2.117	4.0	0.1213	0.1213	4	5
ECO25	0 cm	15 cm	7	6.10	2.769	5.2	0.1127	0.1127	3	8
ECO26	0 cm	10 cm	68	7.40	2.410	4.5	0.1526	0.1526	2	8
ECO27	0 cm	15 cm	11	4.60	7.223	13.2	0.4867	0.4867	4	23
ECO28	0 cm	15 cm	7	6.30	7.749	14.2	0.5376	0.5376	4	13
ECO29	0 cm	15 cm	6	5.65	2.363	4.4	0.1786	0.1786	2	9
ECO30	0 cm	10 cm	13	6.30	1.711	3.2	0.08804	0.08804	2	BDL
ECO31	0 cm	15 cm	10	5.15	8.558	15.6	0.04471	0.04471	3	2
ECO32	0 cm	15 cm	39	4.40	2.993	5.6	0.1387	0.1387	4	6
ECO33	0 cm	15 cm	31	6.10	4.399	8.1	0.2409	0.2409	4	2
ECO34	0 cm	15 cm	9	7.10	3.198	5.9	0.08256	0.08256	2	0
ECO35	0 cm	15 cm	34	6.45	2.946	5.5	0.1716	0.1716	3	5
AP20	0"	3"	4	7.65	0.6801	1.3	0.03	0.03134	5	1
AP20	3"	GW	8	6.95	0.3750	0.8	0.01	0.01058	4	1
AP03	0"	3"	0	8.80	2.892	5.4	BDL	0.009	2	2
AP03	3"	GW	11	6.90	2.795	5.2	0.04	0.03959	35	BDL
BL20	0"	3"	7	5.05	1.753	3.3	0.07	0.07298	2	BDL
BL20	3"	GW	23	4.85	0.9920	1.9	0.01	0.01234	4	BDL
BP20	0"	3"	15	7.80	3.761	7.0	0.08	0.07957	2	1
BP20	3"	GW	8	7.55	2.245	4.2	0.03	0.02739	4	3
BY02	0"	3"	16	7.05	1.730	3.3	0.10	0.1023	2	1
BY02	3"	GW	7	7.65	1.915	3.6	0.05	0.05441	6	5
BY20	0"	3"	19	7.50	1.013	2.0	0.03	0.03465	2	1

Table E-7. Conventional Parameters in Soils
from the 2003 Remedial Investigation.

Sample Location	Begin Depth	End Depth	NO ₃ -N _{w/BDL} (%)	Zn (ppm)	Cu (ppm)	Fe (ppm)	Mn (ppm)	K ¹ (ppm)	Ca ¹ (ppm)	Mg ¹ (ppm)
ECO20	0 cm	20 cm	13.05	2.4	1.8	240	9.8	103	1673	541
ECO21	0 cm	20 cm	1.24	4.4	3.0	316	44.2	86	1862	469
ECO22	0 cm	20 cm	11.7	1.8	1.7	248	10.6	411	1892	556
ECO23	0 cm	15 cm	4.945	1.6	2.7	252	6.4	95	2968	576
ECO25	0 cm	15 cm	8.1	1.4	3.4	242	8.4	127	3560	719
ECO26	0 cm	10 cm	8.15	2.4	2.1	118	5.8	287	5151	520
ECO27	0 cm	15 cm	23	2.1	0.8	444	4.2	142	2438	510
ECO28	0 cm	15 cm	12.7	22.2	3.7	452	7.6	146	4427	1153
ECO29	0 cm	15 cm	9.45	1.6	3.8	334	5.0	276	3239	683
ECO30	0 cm	10 cm	0.25	1.1	5.6	234	8.4	186	3422	561
ECO31	0 cm	15 cm	1.79	1.0	1.0	194	9.0	28	1255	383
ECO32	0 cm	15 cm	6.2	1.4	1.0	362	5.4	78	908	235
ECO33	0 cm	15 cm	1.925	11.2	12.8	334	6.4	136	2764	831
ECO34	0 cm	15 cm	0.433	11.8	12.4	252	6.8	657	3998	281
ECO35	0 cm	15 cm	4.68	5.4	4.1	244	12.0	110	2713	551
AP20	0"	3"	1.19	4.2	6.2	322	2.8	140	6018-6783	194-230
AP20	3"	GW	0.64	4.8	7.3	312	4.8	74	4483-4585	169-200
AP03	0"	3"	2.165	23.2	8.0	102	5.4	304	33456-31926	255-358
AP03	3"	GW	0.25	44.0	4.3	236	10.0	88	5202-5610	185-225
BL20	0"	3"	0.25	9.2	56.2	376	3.2	49	918-1153	111-131
BL20	3"	GW	0.25	15.6	21.8	278	3.0	59	1025	194
BP20	0"	3"	0.705	25.4	20.0	184	3.8	171	12852-9537	337
BP20	3"	GW	3.48	5.0	11.5	204	17.0	136	5712	306
BY02	0"	3"	0.595	1.6	22.6	76	15.4	96	2963	398
BY02	3"	GW	5.3	6.6	20.6	168	70.0	484	5916	969
BY20	0"	3"	0.9	2.8	20.4	74	8.4	48	3116	439

Table E-7. Conventional Parameters in Soils
from the 2003 Remedial Investigation.

Sample Location	Begin Depth	End Depth	Na ¹ (ppm)	Al ¹ (ppm)	CEC (meq/100g)	CEC Qualifier	CEC _{screened} (meq/100g)
ECO20	0 cm	20 cm	20	580	13		13
ECO21	0 cm	20 cm	25	410	14		14
ECO22	0 cm	20 cm	38	580	15		15
ECO23	0 cm	15 cm	41	852	20		20
ECO25	0 cm	15 cm	43	720	24		24
ECO26	0 cm	10 cm	74	740	31		31
ECO27	0 cm	15 cm	14	610	17		17
ECO28	0 cm	15 cm	20	1400	32		32
ECO29	0 cm	15 cm	25	910	23		23
ECO30	0 cm	10 cm	21	740	22		22
ECO31	0 cm	15 cm	17	520	10		10
ECO32	0 cm	15 cm	11	840	7		7
ECO33	0 cm	15 cm	432	1200	23		23
ECO34	0 cm	15 cm	57	600	24		24
ECO35	0 cm	15 cm	24	510	19		19
AP20	0"	3"	47	30	33	*	NA
AP20	3"	GW	83	640	25		25
AP03	0"	3"	243	740	164	*	NA
AP03	3"	GW	234	780	31		31
BL20	0"	3"	90	470	7		7
BL20	3"	GW	60	770	7		7
BP20	0"	3"	64	810	51	*	NA
BP20	3"	GW	134	570	32	*	NA
BY02	0"	3"	37	880	19		19
BY02	3"	GW	14	630	39	*	NA
BY20	0"	3"	30	560	19		19

Table E-7. Conventional Parameters in Soils
from the 2003 Remedial Investigation.

Sample Location	Begin Depth	End Depth	P ² (ppm)	pH	Total C (%)	OM (%)	Total N (%)	Total N _{w/BDL} (%)	NH4-N (ppm)	NO3-N (ppm)
BY20	3"	GW	4	7.85	1.394	2.6	0.11	0.1054	45	BDL
CS20	0"	3"	16	3.65	0.2978	0.6	BDL	0.009	20	BDL
CS20	3"	GW	17	4.70	0.4809	1.0	0.02	0.02069	324	BDL
DB02	0"	3"	1	8.80	4.013	7.4	0.04	0.04205	2	3
DB21	0"	3"	1	8.90	3.379	6.3	0.03	0.02721	1	1
DB21	3"	GW	38	7.20	0.4879	1.0	BDL	0.009	28	1
DK20	0"	3"	14	7.40	2.465	4.6	0.05	0.04535	3	BDL
DK20	3"	GW	22	7.70	0.8736	1.7	BDL	0.009	3	1
FR02	0"	3"	17	8.10	0.8636	1.7	BDL	0.009	2	1
FR02	3"	GW	31	7.60	0.6037	1.2	BDL	0.009	2	0.25
FR20	0"	3"	0	9.05	3.122	5.8	BDL	0.009	1	1
FR20	3"	GW	4	7.85	1.258	2.4	0.04	0.0375	9	3
GB08	3"	GW	18	7.95	5.957	10.9	0.05	0.05236	2	0.38
LY20	0"	3"	22	7.60	1.885	3.5	0.10	0.1007	2	3
LY20	3"	GW	19	6.75	1.517	2.9	0.03	0.02725	8	2
LY21	0"	3"	236	6.70	24.050	41.2	0.71	0.7096	3	6
LY21	3"	GW	171	5.05	4.251	7.9	0.05	0.04824	6	BDL
LY22	0"	3"	3	7.85	7.348	13.4	0.07	0.06983	2	BDL
LY22	3"	GW	34	7.90	1.630	3.1	0.02	0.0195	7	BDL
LY23	0"	3"	7	7.95	0.7383	1.5	BDL	0.009	1	BDL
LY23	3"	GW	10	7.75	1.417	2.7	0.01	0.0102	2	0.41
LY24	0"	3"	16	7.85	2.771	5.2	BDL	0.009	1	BDL
LY24	3"	GW	13	8.65	1.384	2.6	BDL	0.009	1	0.30
LY25	0"	3"	17	8.45	0.3351	0.7	BDL	0.009	1	BDL
LY25	3"	GW	25	7.35	0.2006	0.5	BDL	0.009	3	0.33
MR03	0"	3"	11	4.90	7.619	13.9	0.13	0.1327	4	5

Table E-7. Conventional Parameters in Soils
from the 2003 Remedial Investigation.

Sample Location	Begin Depth	End Depth	NO ₃ -N _{w/BDL} (%)	Zn (ppm)	Cu (ppm)	Fe (ppm)	Mn (ppm)	K ¹ (ppm)	Ca ¹ (ppm)	Mg ¹ (ppm)
BY20	3"	GW	0.25	0.7	6.5	226	132.0	947	3244	1367
CS20	0"	3"	0.25	2.4	4.6	284	2.4	11	418--168--415	179--113
CS20	3"	GW	0.25	24.2	1.8	314	11.0	44	510	235
DB02	0"	3"	2.775	22.4	51.6	80	7.0	163	24480--24990	342--300
DB21	0"	3"	0.605	19.6	13.1	70	4.4	517	21420--21063	459
DB21	3"	GW	0.605	6.2	7.1	144	30.0	120	2698	286
DK20	0"	3"	0.25	8.0	11.5	220	44.0	219	5253	857
DK20	3"	GW	0.565	0.6	2.3	82	36.6	68	1540	316
FR02	0"	3"	0.77	10.0	44.4	40	3.8	42	3004	265
FR02	3"	GW	0.251	8.8	8.9	81	2.2	43	2397	240
FR20	0"	3"	0.76	5.6	4.3	68	3.1	286	24990--21471	352--285
FR20	3"	GW	2.705	2.6	4.0	91	3.8	61	6018	286
GB08	3"	GW	0.384	2.6	5.1	89	20.4	253	10251--9078	862
LY20	0"	3"	2.805	1.1	3.9	63	9.8	92	4769	505
LY20	3"	GW	1.52	1.0	3.2	145	19.3	210	2208	831
LY21	0"	3"	5.8	32.0	6.5	175	7.1	88	5406	449
LY21	3"	GW	0.25	1.7	2.0	190	126.0	92	969--1326	337--265
LY22	0"	3"	0.25	1.4	3.8	2	20.4	85	10557--9027	418
LY22	3"	GW	0.25	0.9	4.2	123	22.8	113	5406	587
LY23	0"	3"	0.25	0.4	1.3	57	11.6	40	1999	444
LY23	3"	GW	0.4125	1.5	3.2	81	29.8	52	2525	469
LY24	0"	3"	0.25	0.4	3.5	53	20.4	44	2591	464
LY24	3"	GW	0.3045	0.9	2.8	63	19.9	121	8517	1209
LY25	0"	3"	0.25	2.6	2.1	58	5.6	40	2514	408
LY25	3"	GW	0.332	0.4	1.2	64	8.8	40	1535	377
MR03	0"	3"	5.15	60.0	32.0	241	4.7	31	1581	224

Table E-7. Conventional Parameters in Soils
from the 2003 Remedial Investigation.

Sample Location	Begin Depth	End Depth	Na ¹ (ppm)	Al ¹ (ppm)	CEC (meq/100g)	CEC Qualifier	CEC _{screened} (meq/100g)
BY20	3"	GW	482	580	32	*	NA
CS20	0"	3"	23	200	3		3
CS20	3"	GW	47	230	5		5
DB02	0"	3"	90	720	128	*	NA
DB21	0"	3"	364--347	980	112	*	NA
DB21	3"	GW	193	510	17		17
DK20	0"	3"	355	560	36		36
DK20	3"	GW	142	680	11		11
FR02	0"	3"	29	370	17		17
FR02	3"	GW	53	330	14		14
FR20	0"	3"	85	1080	111	*	NA
FR20	3"	GW	50	450	33	*	NA
GB08	3"	GW	289	530	54	*	NA
LY20	0"	3"	191	770	29	*	NA
LY20	3"	GW	370	510	20		20
LY21	0"	3"	65	630	31		31
LY21	3"	GW	51	630	9		9
LY22	0"	3"	162	170	50	*	NA
LY22	3"	GW	209	390	33	*	NA
LY23	0"	3"	249	570	15		15
LY23	3"	GW	412	710	18		18
LY24	0"	3"	401	740	19		19
LY24	3"	GW	500	600	55	*	NA
LY25	0"	3"	290	700	17		17
LY25	3"	GW	361	900	12		12
MR03	0"	3"	46	1010	10		10

Table E-7. Conventional Parameters in Soils
from the 2003 Remedial Investigation.

Sample Location	Begin Depth	End Depth	P ² (ppm)	pH	Total C (%)	OM (%)	Total N (%)	Total N _{w/BDL} (%)	NH4-N (ppm)	NO3-N (ppm)
MR03	3"	GW	2	6.80	0.7999	1.6	BDL	0.009	7	BDL
MS20	0"	3"	20	7.55	3.014	5.6	0.03	0.02766	2	0.27
MS20	3"	GW	62	7.15	4.680	8.6	0.04	0.04285	5	BDL
PC20	0"	3"	4	9.60	0.7157	1.4	BDL	0.009	1	1
PC20	3"	GW	22	6.50	0.5105	1.0	BDL	0.009	63	0.36
PF02	0"	3"	13	8.40	0.3043	0.7	BDL	0.009	1	0.28
PS20	0"	3"	14	8.35	0.1522	0.4	BDL	0.009	2	11
PS20	3"	GW	9	9.20	0.2772	0.6	BDL	0.009	1	10
PW20	0"	3"	19	8.20	0.2866	0.6	BDL	0.009	2	15
PW20	3"	GW	9	6.15	0.2703	0.6	BDL	0.009	2	6
RB01	3"	GW	4	8.95	0.7158	1.4	BDL	0.009	1	3
RB20	0"	3"	3	8.00	1.663	3.1	BDL	0.009	2	1
RB20	3"	GW	0	7.70	4.758	8.8	BDL	0.009	2	BDL
RB21	0"	3"	4	7.95	4.134	7.6	0.07	0.07126	2	BDL
RB21	3"	GW	37	6.60	0.9806	1.9	BDL	0.009	3	BDL
RB22	3"	GW	23	8.10	0.2689	0.6	BDL	0.009	2	BDL
RS21	0"	3"	1	7.90	0.5197	1.1	BDL	0.009	2	BDL
RS21	3"	GW	29	7.30	0.3057	0.7	BDL	0.009	2	BDL
RS20	0"	3"	61	6.15	4.699	8.7	0.29	0.2916	6	0.30
RS20	3"	GW	17	7.00	0.4503	0.9	BDL	0.009	2	0.50
SR03	0"	3"	1	7.80	6.047	11.1	0.22	0.2226	3	6
SR03	3"	GW	3	7.55	1.538	2.9	0.08	0.08153	325	BDL
SR20	0"	3"	0	10.25	2.253	4.2	BDL	0.009	3	1
SR20	3"	GW	0	8.15	1.539	2.9	0.02	0.01629	5	2
SR21	0"	3"	5	6.90	2.051	3.8	0.07	0.06966	2	BDL
SR21	3"	GW	3	7.35	1.150	2.2	0.03	0.03086	11	0.30
SR22	0"	3"	3	4.20	1.156	2.2	0.11	0.1135	840	BDL
SR22	3"	GW	42	7.65	1.029	2.0	0.03	0.02632	141	BDL
SR23	0"	3"	4	6.00	2.336	4.4	0.08	0.07632	10	1

Table E-7. Conventional Parameters in Soils
from the 2003 Remedial Investigation.

Sample Location	Begin Depth	End Depth	NO ₃ -N _{w/BDL} (%)	Zn (ppm)	Cu (ppm)	Fe (ppm)	Mn (ppm)	K ¹ (ppm)	Ca ¹ (ppm)	Mg ¹ (ppm)
MR03	3"	GW	0.25	9.8	10.9	147	8.9	36	2581	337
MS20	0"	3"	0.2705	2.4	49.2	97	33.8	73	12036--9180	311
MS20	3"	GW	0.25	4.8	15.0	103	24.8	85	4814	439
PC20	0"	3"	0.655	8.2	4.9	53	9.3	121	7905	357
PC20	3"	GW	0.356	2.8	2.4	169	24.0	60	1958	275
PF02	0"	3"	0.2765	0.8	1.9	40	5.8	56	1642	388
PS20	0"	3"	10.65	0.5	1.6	45	3.7	46	2321	377
PS20	3"	GW	9.95	0.4	3.0	25	6.1	154	8313--8160	2846--3180
PW20	0"	3"	15.35	0.4	2.0	64	7.2	60	2474	377
PW20	3"	GW	5.6	0.6	1.5	127	28.8	42	1204	332
RB01	3"	GW	2.705	14.2	5.3	80	8.5	650	8874	536
RB20	0"	3"	0.605	4.6	10.8	109	18.3	750	18309--14994	796
RB20	3"	GW	0.25	2.6	4.0	71	7.2	259	21828--25347	265
RB21	0"	3"	0.25	138.0	28.2	104	6.6	87	22032--1183	515
RB21	3"	GW	0.25	11.2	7.6	201	11.2	130	2672	255
RB22	3"	GW	0.25	7.2	2.7	70	10.6	48	2973	306
RS21	0"	3"	0.25	1.1	9.4	84	2.3	5	4264	377
RS21	3"	GW	0.25	1.0	4.3	122	3.5	14	1530	479
RS20	0"	3"	0.2955	4.2	14.8	328	2.0	131	1770	699
RS20	3"	GW	0.4985	3.4	5.6	124	3.1	87	1137	515
SR03	0"	3"	6.25	12.8	38.4	190	6.4	103	12444--10812	464
SR03	3"	GW	0.25	2.8	12.2	180	10.4	115	2627	337
SR20	0"	3"	1.17	10.0	5.0	34	1.8	219	35496--34527	485
SR20	3"	GW	1.64	16.2	10.2	98	12.8	154	13566--10098	434
SR21	0"	3"	0.25	4.0	29.4	124	2.8	40	1204	199
SR21	3"	GW	0.3015	1.2	5.6	142	7.4	55	4172	265
SR22	0"	3"	0.25	1.2	3.2	344	43.0	107	1862	265
SR22	3"	GW	0.25	0.7	4.4	106	48.4	95	3029	311
SR23	0"	3"	1.4	5.4	31.8	156	8.0	80	7548	316

Table E-7. Conventional Parameters in Soils
from the 2003 Remedial Investigation.

Sample Location	Begin Depth	End Depth	Na ¹ (ppm)	Al ¹ (ppm)	CEC (meq/100g)	CEC Qualifier	CEC _{screened} (meq/100g)
MR03	3"	GW	34	530	16		16
MS20	0"	3"	41	1030	49	*	NA
MS20	3"	GW	101	560	28		28
PC20	0"	3"	12	590	43	*	NA
PC20	3"	GW	156	330	13		13
PF02	0"	3"	176	440	12		12
PS20	0"	3"	106	410	15		15
PS20	3"	GW	309	840	69	*	NA
PW20	0"	3"	213	710	17		17
PW20	3"	GW	69	510	9		9
RB01	3"	GW	128	560	51	*	NA
RB20	0"	3"	624--545	920	86	*	NA
RB20	3"	GW	141	120	130	*	NA
RB21	0"	3"	105	1020	11		11
RB21	3"	GW	180	1050	17		17
RB22	3"	GW	71	560	18		18
RS21	0"	3"	271	1050	26	*	NA
RS21	3"	GW	461	400	14		14
RS20	0"	3"	253	1300	16		16
RS20	3"	GW	177	400	11		11
SR03	0"	3"	67	700	58	*	NA
SR03	3"	GW	135	380	17		17
SR20	0"	3"	195	870	178	*	NA
SR20	3"	GW	762	680	58	*	NA
SR21	0"	3"	91	510	8		8
SR21	3"	GW	64	400	23		23
SR22	0"	3"	183	390	13		13
SR22	3"	GW	147	450	19		19
SR23	0"	3"	58	470	41		41

Table E-7. Conventional Parameters in Soils
from the 2003 Remedial Investigation.

Sample Location	Begin Depth	End Depth	P ² (ppm)	pH	Total C (%)	OM (%)	Total N (%)	Total N _{w/BDL} (%)	NH4-N (ppm)	NO3-N (ppm)
SR23	3"	GW	2	5.05	1.309	2.5	0.04	0.04438	240	BDL
SR24	0"	3"	0	8.35	3.251	6.0	BDL	0.009	3	1
SR24	3"	GW	37	6.20	0.1622	0.4	BDL	0.009	5	BDL
SL20	0"	3"	22	4.65	1.666	3.1	0.11	0.1138	30	2
SL20	3"	GW	4	7.20	2.183	4.1	0.09	0.0945	325	BDL
SL21	0"	3"	31	7.40	1.247	2.4	0.05	0.05384	4	1
SL21	3"	GW	54	6.90	1.114	2.1	0.01	0.00925	3	6
SL22	0"	3"	18	6.10	0.3844	0.8	BDL	0.009	2	BDL
SL22	3"	GW	12	6.40	0.2862	0.6	BDL	0.009	3	0.26
WM20	0"	3"	0	8.40	5.307	9.8	0.06	0.05764	1	0.32
WM20	3"	GW	6	7.45	11.38	20.6	0.26	0.2568	2	3
WM21	0"	3"	8	8.95	0.3549	0.7	BDL	0.009	1	2
WM21	3"	GW	11	8.25	0.2393	0.5	BDL	0.009	2	2
GB08	0"	3"	31	7.20	1.418	2.7	0.08	0.08338	2	0.39
RB22	0"	3"	10	8.30	0.5654	1.1	BDL	0.009	1	BDL
RB01	0"	3"	6	7.80	0.3855	0.8	BDL	0.009	2	0.46
PC20	0"	3" conc	0	8.65	3.436	6.4	BDL	0.009	2	1

Table E-7. Conventional Parameters in Soils
from the 2003 Remedial Investigation.

Sample Location	Begin Depth	End Depth	NO ₃ -N _{w/BDL} (%)	Zn (ppm)	Cu (ppm)	Fe (ppm)	Mn (ppm)	K ¹ (ppm)	Ca ¹ (ppm)	Mg ¹ (ppm)
SR23	3"	GW	0.25	6.8	12.0	256	37.0	69	2295	281
SR24	0"	3"	0.61	18.8	5.8	38	6.0	458--448	37281--37128	393
SR24	3"	GW	0.25	2.1	38.0	20	10.2	21--21	933	214
SL20	0"	3"	1.545	1.1	9.0	400	14.8	70	969	270
SL20	3"	GW	0.25	1.6	14.2	170	10.0	208	9231	439
SL21	0"	3"	1.25	2.0	4.2	38	12.4	42	3672	219
SL21	3"	GW	6	0.5	10.8	92	29.6	264	6987	321
SL22	0"	3"	0.25	0.5	1.8	64	23.2	59	1326	464
SL22	3"	GW	0.259	0.4	2.0	68	39.4	62	1352	479
WM20	0"	3"	0.3165	234.0	35.0	56	6.2	463--433	22032--28356	469
WM20	3"	GW	2.525	13.8	16.2	210	28.0	338	13464--12189	867
WM21	0"	3"	1.765	2.8	2.0	32	10.6	650	5064	515
WM21	3"	GW	2.27	1.2	1.8	28	6.2	62	3412	485
GB08	0"	3"	0.3935	1.0	2.0	46	13.8	113	2555	413
RB22	0"	3"	0.25	40.0	4.2	24	8.4	367	11169--9078	571
RB01	0"	3"	0.457	30.0	3.0	39	9.6	439	8874	607
PC20	0"	3" conc	0.855	17.0	4.8	33	3.6	376--388	34476--29274	393

Table E-7. Conventional Parameters in Soils
from the 2003 Remedial Investigation.

Sample Location	Begin Depth	End Depth	Na ¹ (ppm)	Al ¹ (ppm)	CEC (meq/100g)	CEC Qualifier	CEC _{screened} (meq/100g)
SR23	3"	GW	72	390	14		14
SR24	0"	3"	318	770	191	*	NA
SR24	3"	GW	68	140	7		7
SL20	0"	3"	26	520	7		7
SL20	3"	GW	171	1460	51		51
SL21	0"	3"	27	450	20		20
SL21	3"	GW	194	670	39		39
SL22	0"	3"	27	520	11		11
SL22	3"	GW	32	520	11		11
WM20	0"	3"	219	770	116	*	NA
WM20	3"	GW	1510	640	76	*	NA
WM21	0"	3"	444	440	33	*	NA
WM21	3"	GW	111	420	22	*	NA
GB08	0"	3"	23	400	17		17
RB22	0"	3"	80	790	51	*	NA
RB01	0"	3"	71	560	51	*	NA
PC20	0"	3" conc	244--220	830	152	*	NA

Notes:

Detection limit for NO₃ is .25ppm.

Detection limit for Total N is .009%.

NOTE: BDL indicates that sample was "below detection limit" for that analyte.

¹ Phosphorus analysis conducted by Bray method.

² Calcium, magnesium, sodium, potassium, and aluminum analysis by Mehlich-3 extraction method.

* The CEC may be overestimated due to the presence of CaCO₃.

Table E-8. Dioxin Chemical Concentrations (ppt) in Plant Tissues from the 2003 Remedial Investigation.

Analyte	ECO21	ECO23	ECO26	ECO28	ECO31	ECO33	ECO34	ECO35
1,2,3,4,6,7,8-HxCDF	0.164 U	0.158 U	0.171 U	0.223 U	0.163 U	0.17 U	0.209 J,K	0.112 U
1,2,3,4,6,7,8-HxCDD	0.285 U	0.259 U	0.248 U	0.309 U	0.72 J,K	0.595 J	0.258 U	0.146 U
1,2,3,4,7,8,9-HxCDF	0.246 U	0.298 U	0.262 U	0.348 U	0.331 U	0.328 U	0.274 U	0.188 U
1,2,3,4,7,8-HxCDF	0.098 U	0.061 U	0.09 U	0.094 U	0.073 U	0.098 U	0.065 U	0.053 U
1,2,3,4,7,8-HxCDD	0.167 U	0.126 U	0.154 U	0.123 U	0.097 U	0.156 U	0.102 U	0.127 U
1,2,3,6,7,8-HxCDF	0.176 U	0.046 U	0.088 U	0.095 U	0.057 U	0.08 U	0.063 U	0.046 U
1,2,3,6,7,8-HxCDD	0.223 U	0.127 U	0.181 U	0.143 U	0.105 U	0.161 U	0.121 U	0.129 U
1,2,3,7,8,9-HxCDF	0.13 U	0.092 U	0.124 U	0.127 U	0.12 U	0.148 U	0.083 U	0.082 U
1,2,3,7,8,9-HxCDD	0.183 U	0.119 U	0.158 U	0.126 U	0.095 U	0.15 U	0.105 U	0.121 U
1,2,3,7,8-PeCDF	0.092 U	0.067 U	0.095 U	0.085 U	0.072 U	0.08 U	0.079 U	0.056 U
1,2,3,7,8-PeCDD	0.133 U	0.113 U	0.123 U	0.141 U	0.097 U	0.101 U	0.102 U	0.065 U
2,3,4,6,7,8-HxCDF	0.177 U	0.062 U	0.099 U	0.11 U	0.083 U	0.105 U	0.071 U	0.06 U
2,3,4,7,8-PeCDF	0.098 U	0.073 U	0.099 U	0.095 U	0.073 U	0.085 U	0.084 U	0.061 U
2,3,7,8-TCDF	0.119 U	0.066 U	0.085 U	0.126 U	0.079 U	0.055 U	0.097 U	0.053 U
2,3,7,8-TCDD	0.11 U	0.06 U	0.084 U	0.082 U	0.059 U	0.077 U	0.073 U	0.052 U
OCDF	0.646 U	0.713 U	0.592 U	0.717 U	0.803 U	1.175 U	0.83 U	0.362 U
OCDD	1.968 J	2.167 B,J	1.225 J,K	1.066 J	17.27 B,J	6.095 B,J	1.998 J	0.767 B,J

Table E-9. Inorganic Chemical Concentrations (ppm) in Plant Tissues from the 2003 Remedial Investigation.

Analyte	ECO21	ECO23	ECO26	ECO28	ECO31	ECO33	ECO34	ECO35
Antimony, Total	0.012	0.011	0.015	0.013	0.01	0.022	0.022	0.012
Arsenic, Total	0.02 U	0.03 B	0.02 U					
Barium, Total	3.26	0.636	1.95	0.75	0.936	2.46	1.47	0.961
Cadmium, Total	0.013	0.008 B	0.006 U	0.006 U	0.006 B	0.016	0.008 U	0.006 B
Chromium, Total	0.1 B	0.15 B	0.13 B	0.1 B	0.09 B	0.07 U	0.14 B	0.06 U
Cobalt, Total	0.021	0.009	0.009	0.004 B	0.025	0.005	0.041	0.001 U
Copper, Total	1.26	1.01	0.94	1.23	1.18	0.93	1.05	1.03
Lead, Total	0.061	0.058	0.042	0.02	0.016	0.031	0.063	0.014
Manganese, Total	36.9	9.81	25.7	11.9	28.2	9.09	24.8	5.05
Mercury, Total	0.004 B	0.005	0.007	0.006	0.004	0.007	0.008	0.007
Nickel, Total	0.25	0.6	0.33	0.98	0.39	0.51	0.26	
Selenium, Total	0.2 U	0.3 U	0.2 U					
Silver, Total	0.004 U	0.003 U	0.004 U	0.004 U	0.003 U	0.005 U	0.005 U	0.004 U
Thallium, Total	0.001 U	0.001 U	0.002 B	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U
Vanadium, Total	0.02 B	0.02 B	0.02 B	0.01 B	0.01 B	0.02 B	0.02 B	0.01 U
Zinc, Total	7.05	3.37	3.85	4.38	4.38	4.28	3.85	4.03

Table E-10. Polychlorinated Biphenyl Chemical Concentrations (ppb) in Plant Tissues From the 2003 Remedial Investigation.

Analyte	ECO21	ECO23	ECO26	ECO28	ECO31	ECO33	ECO34	ECO35
Aroclor 1016	NA	NA	NA	NA	NA	0.65 U	0.65 U	0.65 U
Aroclor 1221	NA	NA	NA	NA	NA	0.65 U	0.65 U	0.65 U
Aroclor 1232	NA	NA	NA	NA	NA	0.65 U	0.65 U	0.65 U
Aroclor 1242	NA	NA	NA	NA	NA	0.65 U	0.65 U	0.65 U
Aroclor 1248	NA	NA	NA	NA	NA	0.65 U	0.65 U	0.65 U
Aroclor 1254	NA	NA	NA	NA	NA	0.65 U	0.65 U	0.65 U
Aroclor 1260	NA	NA	NA	NA	NA	0.65 U	0.65 U	0.65 U

Notes: NA indicates not analyzed.

Table E-11. Total Solids Concentrations (percent) in Plant Tissues from the 2003 Remedial Investigation.

Analyte	ECO21	ECO23	ECO26	ECO28	ECO31	ECO33	ECO34	ECO35
Solids, Total (percent)	20.9	13	18.8	19	14.6	20	25.1	16.1

Table E-12. Dioxin Chemical Concentrations (ppt) in Earthworm Tissues from the 2003 Remedial Investigation.

Analyte	ECO21	ECO23	ECO26	ECO28	ECO31	ECO33	ECO34	ECO35
1,2,3,4,6,7,8-HpCDF	0.865 J	0.333 U	0.932 J	0.245 U	0.649 J,K	0.964 J	5.426	45.913
1,2,3,4,6,7,8-HpCDD	2.984 J	1.137 U	4.484 J	1.187 J	2.733 J	7.833	22.345	53.554
1,2,3,4,7,8,9-HpCDF	0.269 U	0.539 U	0.306 U	0.473 U	0.309 U	0.277 U	0.536 U	1.496 J
1,2,3,4,7,8-HxCDF	0.129 U	0.165 U	0.119 U	0.201 U	0.115 U	0.094 U	0.717 J	1.051 J
1,2,3,4,7,8-HxCDD	0.164 U	0.161 U	0.161 U	0.213 U	0.156 U	0.16 U	0.418 J	0.763 J,K
1,2,3,6,7,8-HxCDF	0.125 U	0.158 U	0.116 U	0.193 U	0.117 U	0.091 U	0.528 J	0.694 J
1,2,3,6,7,8-HxCDD	0.194 U	0.181 U	0.44 J	0.244 U	0.172 U	0.564 J	3.773 J	6.015 J
1,2,3,7,8,9-HxCDF	0.171 U	0.194 U	0.163 U	0.347 U	0.143 U	0.123 U	0.218 U	0.503 U
1,2,3,7,8,9-HxCDD	0.175 U	0.167 U	0.171 U	0.224 U	0.16 U	0.175 U	0.745 J	0.809 J,K
1,2,3,7,8-PeCDF	0.096 U	0.124 U	0.089 U	0.114 U	0.135 U	0.096 U	0.641 J	0.193 J,K
1,2,3,7,8-PeCDD	0.134 U	0.176 U	0.137 U	0.149 U	0.182 U	0.124 U	0.795 J	0.826 J
2,3,4,6,7,8-HxCDF	0.138 U	0.173 U	0.128 U	0.226 U	0.125 U	0.105 U	0.36 J	1.153 J
2,3,4,7,8-PeCDF	0.096 U	0.129 U	0.09 U	0.117 U	0.126 U	0.103 U	0.541 J	0.303 J
2,3,7,8-TCDF	0.493 UC	0.149 U	0.392 UC	0.506 UC	0.445 U	0.354 C,J	0.806 C	0.458 C,J
2,3,7,8-TCDD	0.115 U	0.133 U	0.1 U	0.107 U	0.154 U	0.111 U	0.131 U	0.255 J,K
OCDF	0.827 U	0.325 U	2.365 J	1.352 U	0.845 J,K	1.887 J,K	10.868	84.66
OCDD	21.127 B	8.21 J	34.199 B	7.146 B,J	14.36 J	55.994 B	134.952 B	293.542 B

Table E-13. Inorganic Chemical Concentrations (ppm) in Earthworm Tissues from the 2003 Remedial Investigation.

Analyte	ECO21	ECO23	ECO26	ECO28	ECO31	ECO33	ECO34	ECO35
Antimony, Total	0.004 B,N	0.001 U,N	0.006 U,N	0.001 U,N	0.005 B,N	0.003 B,N	0.257 N	0.004 B,N
Arsenic, Total	0.71	0.33	0.52	0.34	0.17	0.32	13.3	0.4
Barium, Total	3.93	5.15	9.62	4.31	1.58	2.98	0.411	2.89
Cadmium, Total	0.463	0.254	0.328	0.231	0.263	0.668	0.777	0.478
Chromium, Total	1.19	2.94	4.28	2.15	0.6	1.31	0.17	1.14
Cobalt, Total	0.6	0.763	1.11	0.592	0.348	0.484	1.05	0.44
Copper, Total	2.54	2.32	5.48	2.69	1.1	2.87	4.45	2.42
Lead, Total	0.78	0.938	2.07	0.539	0.207	0.554	3.03	0.821
Manganese, Total	12.1	20	39.3	14.9	12.4	10.8	3.22	13.3
Mercury, Total	0.086	0.035	0.034	0.032	0.017	0.023	0.022	0.189
Nickel, Total	1.08	1.72	3.88	1.64	0.862	0.9	1.22	1.24
Selenium, Total	1.1	0.6	0.4	1	0.2 U	0.6	0.2 U	0.6
Silver, Total	0.014	0.012	0.016 B	0.013	0.007	0.009	0.005	0.01
Thallium, Total	0.005	0.0073	0.0101 B	0.0055	0.0024 B	0.0045	0.0076	0.0039
Vanadium, Total	1.95	3.61	8.18	3.15	0.92	1.67	0.2	2.13
Zinc, Total	80.1	37	51.9	74.4	40	55	25	66.4

Table E-14. Polychlorinated Biphenyl (PCB) Chemical Concentrations (ppb) in Earthworm Tissues from the 2003 Remedial Investigation.

Analyte	ECO21	ECO23	ECO26	ECO28	ECO31	ECO33	ECO34	ECO35
Aroclor 1016	NA	NA	NA	NA	NA	0.65 U	0.68 U	0.65 U
Aroclor 1221	NA	NA	NA	NA	NA	0.65 U	0.68 U	0.65 U
Aroclor 1232	NA	NA	NA	NA	NA	0.65 U	0.68 U	0.65 U
Aroclor 1242	NA	NA	NA	NA	NA	0.65 U	0.68 U	0.65 U
Aroclor 1248	NA	NA	NA	NA	NA	0.65 U	0.68 U	0.65 U
Aroclor 1254	NA	NA	NA	NA	NA	0.65 U	0.68 U	0.65 U
Aroclor 1260	NA	NA	NA	NA	NA	0.65 U	0.76	0.65 U

Notes: NA - analysis not conducted.

Table E-15. Conventionals (percent) in Earthworm Tissues from the 2003 Remedial Investigation.

Analyte	ECO21	ECO23	ECO26	ECO28	ECO31	ECO33	ECO34	ECO35
Acid Insoluble Residue	19.4	24.1	27.1	12	10.9	7.96	1.01	14.3
Solids, Total	21.2	18	19.3	17.9	17.8	15.7	17.4	17.4
Lipids	0.89	9.59	0.67	1.1	0.32	1.08	0.68	0.82